An assessment of the costs and benefits of Consignia's current Universal Service Provision

A Discussion Document

June 2001

Summary

Postcomm's primary duty is to act in a manner best calculated to ensure the continued provision of a Universal Postal Service ("UPS") at an affordable uniform national tariff. At present, Consignia is the sole provider of the UPS in the UK and is required to provide that service under the terms of the licence that it has been granted by Postcomm. To better understand the nature of this licence obligation, Postcomm is keen to understand the extent to which the provision of the UPS, within Consignia's broader provision of postal services, may impose on it a net cost or confer a net benefit in the current market environment.

Postcomm asked an independent consultant, Andersen, to advise on approaches to assessing the costs and benefits of Consignia's universal service provision. Postcomm also asked Andersen to provide a high-level critique of Consignia's data, to compute results, and to conduct appropriate sensitivity analyses. The results of Andersen's analysis are presented in the tables contained in this report. Finally, Postcomm asked Andersen to advise on an appropriate interpretation of the results in the context of Consignia's overall business.[1] The approach adopted in this paper, comments on data, and interpretation of the results are consistent with Andersen's advice.

Approach

Postcomm has considered a number of methodologies for the estimation of the current cost imposed on Consignia by the universal service provision. Postcomm has assessed the cost to Consignia in the current market as the "loss" generated by the mail volumes whose prices do not recover their long-run avoidable costs. The sum of any "losses" should be netted off against any wider benefits that Consignia may enjoy from being a universal service provider (though Postcomm has not quantified these wider benefits in this report). This approach is characterised as the net avoidable cost ("NAC") of the UPS. This methodology is broadly consistent with that adopted by other industry

[1] Postcomm has not asked Andersen to validate or to perform any other checks on the data provided by Consignia, nor has it done so itself.

regulators in addressing similar questions and by consultants to the European Commission in their review of the cost of the universal service obligation in Member States" (1998).

Postcomm has not in this report assessed how Consignia's profitability and ability to fund and support its operations, including the UPS, might be affected by further liberalisation of postal services in the UK. This assessment would require a consideration of various factors that do not affect the current cost of providing the UPS. These factors include the level and type of competition to which Consignia is exposed and consequent changes in behaviour and performance, changes in underlying cost structures, the rate of efficiency gain and innovation and future prices and service specifications. To assist it in taking its work forward, Postcomm has, however, sought views on the expected interplay of these issues in its consultation document on "Promoting effective competition in UK postal services".

Data considerations

The data used in this report were provided by Consignia and relate to the financial year 1999/2000. Postcomm has made no adjustments to these data but has considered sensitivities around the numbers to better understand the emerging results. Postcomm does, however, note four key features of the data.

First, Postcomm has only analysed a set of 22 inland letter products for which Consignia has provided data. These products cover over 95% of inland letter products, thus excluding Parcelforce and international letter products. In other respects, it represents a wide range of products at a higher service specification than the definition of the UPS in the Act (Postcomm's consultation on competition sets out the definition of the UPS in the Postal Services Act 2000 and consults on the most appropriate approach to identifying which services should be considered as satisfying the "universal postal service"[2]). Strictly, therefore, the analysis refers to the sum of "loss-making" volumes across Consignia's main current inland letter products rather than the cost of the UPS as defined in the Act. In view of these issues, Postcomm has considered each product individually to estimate the extent to which it may impose a net avoidable cost on Consignia.

Second, the data submitted by Consignia are provided at a highly disaggregated "route-wise" level. A single "route" defines a service across a combination of attributes including product-type (e.g. First Class Stamped Mail), the distance over which the product is carried, the size and weight of the product, the density in the delivery location and the type of recipient (business or residential). There are 29,040 such potential routes of which 20,340 had volumes in 1999/2000. This high-level of disaggregation assumes that Consignia, in the absence of an obligation to provide the UPS, might choose (and indeed be able) to avoid the costs not just of whole product types but of individual mail items with very specific characteristics (defined by a combination of all the attributes above). To the extent that it would not be possible for Consignia to withdraw from some highly disaggregated "loss-making " mail items without also withdrawing from some highly disaggregated profitable mail items, this might overestimate the NAC on a "route-wise" basis.

Third, Postcomm has used Consignia's data on long-run marginal costs ("LRMCs") as a proxy for avoidable costs. These are the costs that Consignia considers to be "avoidable" through loss of volume. Postcomm has not assessed the extent to which Consignia's data would represent a reasonable estimate for efficient cost behaviour in the context of reductions in volumes. In addition, Postcomm has not adjusted Consignia's data to reflect the costs that might be avoided with significant volume changes. For example, at the aggregate level, e.g. product types, to the extent that some costs may be common across routes, more costs might be avoidable than the sum of route-wise data suggest (though Postcomm notes that Consignia uses aggregate LRMC factors for planning purposes that are not dissimilar from the sum of the route-wise data).

Fourth, the data reflect Consignia's costs in 1999/2000 and have not been adjusted to reflect efficient cost levels.

2 Promoting Effective Competition in UK Postal Services: A Consultation Document, June 2001.

Emerging results of analysis

Based on the methodology and Consignia's data described above, the following results emerge:

- each of the 22 product types contained in the data set (e.g. First Class Stamped Mail, Second Class Stamped Mail, Flatsort, etc.) covers its long-run avoidable costs in aggregate. The "margin" on individual products varies markedly. Among the products for which information is presented, Second Class (Stamped) has one of the lowest "margins" of revenue less avoidable costs (6p per unit), while Flatsort/Packetsort/Packetpost 1 and 2 have the highest (32p per unit). Thus at the level of whole product types, the NAC, before any wider benefits are included, is zero;

- each of Consignia's delivery density categories (City Centre, Urban, Suburban, Rural and Deep Rural) has a positive "margin" in aggregate before any wider benefits are included. Moreover, the "margin" per unit is fairly constant across all delivery densities;

- each distance, size, and weight step, and each type of recipient (business and residential) also has a positive "margin" in aggregate before any wider benefits are included;

- at the most disaggregated route-wise level (i.e. taking combinations of ***all*** of the attributes identified above) around 16% of routes exhibit a net avoidable cost (before any wider benefits are included). For example, the NAC on a route-wise basis for Second Class only (defined as Stamped 2, Metered/ Pre-paid 2 and Standard Tariff 2) is £34m. Across all 22 inland letter products the total NAC is £81m; and

- Consignia may enjoy some wider commercial benefits from its status as a universal service provider, which should be set against the NAC results above. Postcomm has not quantified these benefits, but they might include benefits

associated with brand enhancement and corporate reputation, Special Privileges such as VAT exemption and avoidance of customer transaction costs.

The results in context

On the basis of the NAC methodology and the data provided by Consignia the highly disaggregated estimate for the NAC across all products is equivalent to an average price mark-up of just over 1.5% or around one fifth of Consignia's 1999/2000 operating profits. However, the current cost of the universal service obligation is unlikely to be greater and could be less than this for the following reasons:

- the analysis considers the entire range of 22 products provided by Consignia's inland letters business, which are generally provided at service standards higher than the minimum requirement of the UPS under the Act, and include products (such as Presstream) that Consignia does not regard as being part of the UPS;

- there is no quantification of the wider benefits that Consignia might enjoy by being a (sole) universal service provider. These benefits may not need to be large relative to Consignia's turnover in order to offset the NAC across all routes;

- if it were not possible or commercially viable for Consignia to withdraw from some highly disaggregated "loss-making " mail items without also withdrawing from some highly disaggregated profitable mail items, the NAC might be overestimated on a "route-wise" basis; and

- the data have not been adjusted to reflect efficient cost levels.

Postcomm notes that a previous estimate of the cost of Consignia's UPS by consultants employed by the European Commission, estimated it at £22.6m for the financial year 1996/1997. This analysis also did not quantify the benefits of universal service provision, but did use more aggregated data, which is likely to be a major contributor to the difference between the two estimates.

Therefore, taking Consignia's own data, and putting aside some of the potential limitations of the data discussed above, the emerging results suggest that it may be difficult to conclude that Consignia's universal service provision represents a significant net cost in the current market environment.

Next Steps

While recognising that the construction of the data used reflects Consignia's own representation of its business, Postcomm notes that a less "stylised" view and more physically derived data set than Consignia's might produce different results. For example, Consignia may be able to avoid more costs efficiently than the sum of the route-wise data suggests because it might be able to avoid some costs that are common across individual routes. If a higher level of aggregation across volumes meant that more costs became avoidable, this might increase the NAC compared to the more disaggregated results above. For example an increase of 5% in Consignia's estimate of cost avoidable by route could increase the NAC by about £15m. On the other hand, the more costs become avoidable, the less the potential impact on Consignia's profitability of falling volumes (for example brought about by competition). Given these potential implications, Postcomm will continue its assessment of Consignia's costs and LRMC estimates in the context of its work on introducing competition and reviewing the controls on Consignia's prices.

Postcomm also notes that this paper necessarily only provides a snapshot of the current position that may well change over time, particularly as Consignia's behaviour and cost structures are likely to change in response to the development of competition. Accordingly, Postcomm intends to review this analysis from time to time in light of the development of competition. This is similar to the approach adopted by OFTEL, which has undertaken periodic reviews into the nature and scale of the cost of universal service obligations in telecommunications.

Throughout this document, Postcomm has raised questions for discussion that are designed to improve its understanding of the issues and interpretation of the analysis.

AN ASSESSMENT OF THE COSTS AND BENEFITS OF CONSIGNIA'S CURRENT UNIVERSAL SERVICE PROVISION

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NOTE: [REDACTED] = Figures removed at the request of Consignia on the grounds of commercial confidentiality.

1 Introduction

What is Postcomm?

1.1 The Postal Services Act 2000 ("the Act") establishes the Postal Services Commission ("Postcomm") as the independent regulatory body for the postal services industry in the United Kingdom. Postcomm's Business Plan, which can be found on its website www.psc.gov.uk, gives details of its duties, functions, objectives and work plan.

Postcomm's main duties

1.2 Postcomm's primary duty is to seek to ensure that customers continue to be able to enjoy a universal postal service ("UPS"). The UPS consists of the delivery and collection at least once every working day of mail (not exceeding 20kg in weight) and the provision of a registered post, all at affordable prices that are uniform throughout the UK.

1.3 Subject to this duty, Postcomm is also charged with furthering the interests of users of postal services, where appropriate, by promoting effective competition between postal operators. In doing so, Postcomm must have regard to the interests of those who are disabled or chronically sick, of pensionable age, on low incomes and who reside in rural areas.

1.4 Subject to both duties above, Postcomm has a further duty to promote efficiency and economy on the part of postal operators.

1.5 Finally, in performing all of its duties, Postcomm must have regard to the need to ensure that licence holders are able to finance the activities authorised or required by their licences.

Purpose of this report

1.6 The purpose of this report is to provide an initial analysis of the potential costs and benefits that might be associated with Consignia's provision of the UPS in the current market environment. Postcomm has done this by assessing whether the provision of the universal service, within Consignia's broader provision of postal services compels it to provide "loss-making" services that it may otherwise avoid if it were not required to provide a universal service. This report does not attempt to determine which of Consignia's services, within its broad range of services should be considered part of the universal postal service.

1.7 This report also sets out a brief qualitative assessment of the benefits that Consignia may obtain on account of providing a universal postal service. These benefits may offset some or all of the costs of being subject to a universal service obligation. Postcomm has not, however, undertaken a detailed quantitative analysis of these potential benefits.

1.8 Postcomm asked an independent consultant, Andersen, to provide advice on approaches to assessing the costs and benefits of Consignia's universal service provision. Postcomm also asked Andersen to provide a high level critique of Consignia's data, to compute results and to conduct appropriate sensitivity analyses. Finally, Postcomm asked Andersen to provide advice on an appropriate interpretation of the results in the context of Consignia's overall business. Postcomm has not asked Andersen, nor has it itself, validated or performed any other checks on the data provided by Consignia. The approach adopted in this paper, comments on data, and interpretation of the results are consistent with Andersen's advice. The results of Andersen's analysis are presented in the tables contained in this report.

1.9 Andersen has also advised Postcomm that the cost (or benefit) of the universal postal service and the issue of funding licensed activities (in terms of recovering "unavoidable" costs) may appropriately be analysed as separate issues and that their significance may change under market liberalisation. The approach taken by Postcomm in this paper and also in Postcomm's consultation paper on *Promoting effective competition in UK Postal Services,* which consults on a range of issues, including those relevant to the potential impact of competition on Consignia's ability to fund its licensed activities in a more competitive market is consistent with Andersen's advice.

Approach

1.10 Postcomm has considered a number of methodologies for the estimation of the net cost imposed on Consignia by the universal service provision. Postcomm considers it appropriate to assess the level of costs that might represent a burden on Consignia of providing the universal service by considering the net costs that Consignia would choose to avoid if it was not subject to the obligation to provide a UPS. This is characterised as the net avoided cost ("NAC") of the UPS.

1.11 This NAC methodology is broadly consistent with that adopted by other industry regulators and in a study prepared by NERA for the European Commission in their review of similar issues published in 1998.[3] NERA's study calculated the amount of profit that Consignia and the other EU postal operators lost as a result of having to provide a universal postal service. The methodology was based on calculating any net avoidable costs associated with services from which the operators, as profit maximising businesses, would withdraw if they were not obliged to provide a UPS.

1.12 NERA calculated this loss based on avoidable costs, after stripping out overheads and other joint costs that could not be attributed to particular services. The avoidable costs of providing these services were subtracted from revenues.

[3] "Costing and Financing of the Universal Service Obligation in the Postal Sector in the European Union, NERA 1998".

Where revenues for particular services did not cover their avoidable costs, these shortfalls were aggregated to provide an estimate of the cost of UPS provision (the so-called 'Net Avoided Cost" approach). Using this approach, the extra burden on Consignia of providing the universal service was estimated to be £22.6m (excluding any benefits that accrue to Consignia from its provision). This was based on 1996/1997 data provided by Consignia. The study also identified some of the benefits of being a UPS provider but did not quantify these.

1.13 This report provides a further assessment of potential costs of Consignia's UPS provision. It differs from the study produced for the European Commission in that it uses more recent (1999/2000) and more disaggregated data provided by Consignia.

Data

1.14 Postcomm has not made any amendments to the data submitted by Consignia. Postcomm has a number of concerns about the data submitted, which are set out in this report. In the context of these concerns, Postcomm has conducted various sensitivity analyses.

1.15 The data are for Consignia's financial year 1999/2000. They relate to 22 inland letter products that together comprise over 95% of inland letter revenues. The data include items which are sent recorded delivery, but include only the basic product costs and revenues and not the incremental costs and revenues associated with recorded delivery. The revenues associated with these products collected through Post Office Networks (previously Post Office Counters Limited) are included in the route-wise data provided by Consignia. In addition, the data includes estimates of the long-run marginal cost ("LRMC") to counters of handling letters transactions. The data does not include Parcelforce or international products, hence the analysis has only considered the letters business. Postcomm has not performed any analysis of other inland letter products, parcels or international letter services.

1.16 A key feature of the data submitted by Consignia is that they are provided at a route-wise level. There are 29,040 potential routes, of which 20,340 were utilised, i.e. experienced traffic in 1999/2000. These routes represent a highly disaggregated and stylised view of Consignia's business. A single "route" defines a service across a combination of dimensions including product-type (e.g. First Class Stamped Mail), the distance over which the product is carried, the size and weight of the product, the density (in terms of delivery points) in the delivery location and the type of recipient (business or residential).

1.17 Postcomm has used Consignia's data on LRMCs as a proxy for avoidable costs. Consignia estimate these costs to be around 60% of total costs.

The structure of the document

1.18 The remainder of this document is set out as follows:

- Chapter 2 discusses the definition of universal service provision as set out in the Postal Service Act 2000 and compares this with the products and services currently offered by Consignia;

- Chapter 3 sets out how Postcomm has assessed the scale of elements of "loss" that may be associated with being a universal service provider;

- Chapter 4 assesses Consignia's "loss-making" services at an aggregate level;

- Chapter 5 assesses Consignia's "loss-making" services at a route-wise level;

- Chapter 6 considers the particular services that contribute to elements of "loss";

- Chapter 7 considers sensitivities around the results in Chapters 5 and 6;

- Chapter 8 discusses some of the benefits that Consignia might receive from universal service provision; and

- Chapter 9 summarises the findings of the analysis and discusses next steps.

How to respond

1.19 Responses should reach Postcomm by 28 September 2001. They can be sent by post, electronically or by fax to Tasneem Azad. The addresses are:

Tasneem Azad
Deputy Director
Competition and Regulation Directorate
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Confidentiality of responses

1.20 Postcomm intends to make public the responses it receives to this discussion document. If you do not want all or part of your response to this document to be read by anyone outside Postcomm, please ensure your response clearly indicates which parts are confidential. If you are happy for the substance of your contribution to be made public, but do not want the name of the individual who signed it or organisation who submitted it to be revealed, please indicate this by adding “name of organisation/sender not to be published”.

2 The universal postal service and Consignia's products

Outline of this chapter

2.1 This chapter briefly reviews:

- the definition of a UPS as set out in the Postal Services Act 2000; and
- the products for which Consignia has provided data compared to the Act definition.

2.2 The chapter concludes by observing that the data set provided generally represents a wide range of products at a higher service specification than the definition of the UPS as set out in the Act.

Definition of the universal postal service

2.3 Under the Act, the UPS consists of the delivery and collection at least once every working day of mail (not exceeding 20 kilograms in weight) and the provision of a registered post. The prices for these services must be "affordable" and geographically uniform throughout the UK. Specifically, the definition of the UPS as set out in the Act and reflected in Consignia's licence, is as follows:

"a) except in such geographical conditions or other circumstances as the Commission considers to be exceptional-

(i) at least one delivery of relevant postal packets is made every working day to the home or premises of every individual or other person in the United Kingdom or to such identifiable points for the delivery of relevant postal packets as the Commission may approve, and

(ii) at least one collection of relevant postal packets is made every working day from each access point,

b) a service of conveying relevant postal packets from one place to another by post and the incidental services of receiving, collecting, sorting and delivering such packets are provided at affordable prices determined in accordance with a public tariff which is uniform throughout the United Kingdom, and

c) a registered post service is provided at such prices. "[4]

2.4 The Act definition does not determine who shall provide the universal service or which particular products are "universal services". The Act definition is instead phrased in terms of activities within the postal value chain (e.g. collection and delivery) and coverage (every home or premise). In addition, the Act does not impose any maximum time interval between collection and delivery. However, the European Postal Directive implies a maximum time between collection and delivery of five days for intra community cross-border mail and requires domestic inland services to have compatible service standards. Consignia must, however, meet the service standards set out in its licence, which have been agreed with Postwatch. It should also be noted that, neither the Act nor the European Directive place any monetary limit on or define "affordability".

2.5 As discussed in the consultation document on promoting effective competition, it is clear that the provision of the UPS is not synonymous with the provision of Consignia's current services. In that document Postcomm has consulted on the approach it ought to adopt to identify what services fulfill Consignia's universal service obligation. The rest of this section considers how Consignia's existing products relate to the definition of the UPS in the Act and sets out Postcomm's approach to assessing the cost of Consignia's provision of the UPS in this context.

[4] The full definition of the UPS and associated definitions are contained in Sections 4 and 125 of the Act.

Consignia's product range and the Act definition

a) Delivery time and purchase criteria

2.6 Condition 2 of Consignia's licence stipulates that Consignia must provide a universal service at an affordable uniform tariff, in line with the definition in the Act. To understand the nature of Consignia's universal service provision, it is helpful to consider its present products against this definition.

2.7 In practice, Consignia markets services to customers in the form of products that have specified time intervals between collection and delivery, and other service standards. Table A1.1 in Annex 1 sets out the collection to delivery time associated with Consignia's main products together with a summary of any relevant purchasing criteria. The table outlines the services that Consignia considers it provides nationwide at a uniform tariff. Table A1.1 suggests that First and Second Class (Stamped) are the only products for which there are no restrictions on purchase and are provided at a uniform nationwide tariff. First and Second Class (Metered) products are also widely available to customers who have the use of a franking machine.

b) Daily collections and deliveries

2.8 Consignia has provided limited information on the number of collections and deliveries in different geographic areas. It has stated that for all areas of the country there is a minimum of one collection and some areas (e.g. urban areas) benefit form more. All areas also have a Saturday collection. Consignia has stated that the collection time specifications are based on network connections and are therefore based on the latest access time into the network. For example, in commercial areas the latest posting time would be later than in some rural areas in order to connect with the network for next day delivery for First Class items. This is only for post box collections, as large business collections are based on individual agreements with customers.

2.9 Consignia has been unable to provide information on the breakdown of collection by source; for example, the proportion collected from pillar boxes and customer premises. However, a study undertaken for the European Commission provided data for the EU average. These are presented in Table 1 below. If it can be assumed that Consignia's collection pattern is similar to the EU average, it suggests that nearly half of mail is not collected directly from post boxes or post offices, but from customer premises and direct receipts at the collection centre.

Table 1 – EU average of collection sources, 1998

Source of collection	% of total
Volume cleared at post boxes	17%
Volume cleared at post offices and agencies	36%
Volume cleared at customers' premises	31%
Volume injected by customers direct into the sorting plant	17%

Source: CTcon study [5]

2.10 On deliveries, Consignia has provided information which suggests that urban areas receive an average of two deliveries per day whilst rural areas receive an average of one delivery per day.

c) Reasonable access

2.11 The collection and delivery figures may conceal a range of performance across customers. For example, those in very remote areas may receive a lower service specification. Consignia's licence (Condition 3(1)) requires it to ensure that it provides letter boxes and access points where letters and parcels can be posted so as to meet the reasonable needs of users, having regard to the cost of service provision.[6] This condition specifies the percentage of people nationally who should have access within at most 5km of to at least one post office. A small proportion of users do not have access within 5km. These users tend to live in

[5] A copy of this study ("The Liberalisation of Clearance, Sorting and Transport") can be found on the European Commissions web-site: www.europa.org.
[6] This condition also meets a European Community obligation that the density of points of contact and of access points to the universal service takes into account the needs of users.

isolated rural areas. The licence has a further specification on a postcode area basis of the percentage of users who should have access within 10km.

Approach adopted in this document

2.12 Although Consignia's products and customer offerings do not align with the definition of the universal service in the Act, Postcomm has sought to assess the potential costs, and consider qualitatively the benefits, across the 22 inland letter products for which route-wise data exist. This assessment, therefore, is implicitly a function of Consignia's service. This has the practical advantage of data being available for "real" services as compared to "hypothetical" services and has allowed Postcomm to undertake the analysis for a number of various practical interpretations of the universal service. However, Postcomm recognises that this approach does not assess the costs and benefits of the strict definition of the universal service in the Act, which generally has fewer, or less demanding, service specifications than Consignia's products.

2.13 This document does not seek to develop Postcomm's view as to which products ought to be classified as "universal services". Postcomm is consulting on its approach to this issue in its June 2001 consultation on promoting effective competition.

Summary

2.14 This chapter has made a number of observations in relation to Consignia's mail business in the context of the definition of the universal service in the Act. Notably:

- the Act defines the universal service in terms of processes and not specific products provided by Consignia (except registered post). It does not specify a maximum time between collection and delivery, although the European Commission Directive requires this to be 5 days for intra-community cross-border mail and domestic inland services must have compatible standards; and

- Consignia's products are generally provided to a higher specification (number of collections and deliveries) than the minimum set out in the Act.

C2.	**Question**
a)	**Postcomm invites views on whether, given that the Act definition of the universal service does not align with the particular products offered by Consignia, for the purposes of this analysis it is appropriate to consider a wide range of products.**

3 Approach to assessing the potential costs of universal postal service provision

Outline of this chapter

3.1 Postcomm's consultation document on promoting effective competition considers the appropriate basis for estimating the cost of the UPS. This chapter briefly reviews the general approach Postcomm, advised by Andersen, has used to assess the current cost of the UPS provision. The data provided by Consignia and used in this analysis, and their potential limitations, are then described.

Approach

3.2 A practical interpretation of the potential cost of Consignia's universal service provision might be the "losses" that arise from the provision of certain services. "Losses" in this context are taken to be the difference between avoidable costs and prices. A profit-maximising operator might wish to withdraw some or all of the services for which avoidable costs exceed prices or raise its prices for these services. However, Consignia is prevented from doing this because of its licence obligation to provide a universal service at an affordable uniform tariff. Indeed, even a profit-maximising operator may not, in practice, be able to avoid these "loss-making" routes, as each of these individual routes may not represent actual areas of the business that could be discontinued by Consignia as a practical business decision. We have not considered the practical constraints of withdrawing certain aggregated and disaggregated services.

3.3 Set against the potential costs of "loss-making" services are the potential commercial benefits arising from providing the universal service. Thus a profit-maximising operator might in practice wish to continue to provide a product because the wider benefits outweigh these costs. Any calculation of the net cost from universal service provision ought to take these benefits into account.

3.4 To make an assessment of the possible scale of such a net cost incurred by Consignia, Postcomm requires an estimate of the avoidable costs associated with providing particular mail services. A common approach to identifying these costs is to calculate the costs that Consignia could avoid in the long-run if it no longer had to provide the service in question. This excludes costs that are deemed not to vary with volumes.

3.5 Subtracting the long-run avoidable cost for particular services from the associated revenues gives an estimate for the "gross margin" that Consignia earns on different services. Where revenues for a service does not recover the long-run avoidable cost of providing that service, the "gross margin" is negative and Consignia can be said to be providing the product at a "loss" that will need to be financed from other sources. Summing all such "losses" on these routes provides an estimate of the potential cost of the provision of the universal service under current market conditions.

3.6 A similar approach was used by consultants NERA to estimate the 'cost' of the universal service in the EU and by OFTEL for its reviews of the cost of the universal service in telecommunications. Other industry regulators have also used it.[7]

3.7 In principle, an adjustment could be made to costs to reflect those of an "efficient operator" earning a normal rate of return. This removes the elements of unprofitability on loss-making routes due to inefficiency or excess returns to capital providers and enables a clearer view to be drawn on the scale and nature of the unprofitable routes. However, Postcomm has sought to present the data as provided by Consignia and hence have not made any adjustments for potential efficiency improvements.

[7] Consignia also use the notion of avoidable costs to calculate the discounts offered to customers for network access and work-share arrangements.

3.8 This approach to assessing the costs and benefits of providing the universal service is relevant to the market structure. This is based on potential competition for services over 350g or £1 but no significant competition below these thresholds. Postcomm's approach is illustrated in Table 2. This document assesses the impact on Consignia of moving from quadrant A to quadrant B.

3.9 The introduction of significant competition within the licensed area may cause prices and costs to change. Postcomm therefore expects this issue to be reviewed from time to time, especially when information has been revealed about the impact of competition on Consignia's revenues and costs. This is illustrated in Table 2 as a move from quadrant C to quadrant D.

Table 2 – Change in Consignia's commercial position under different scenarios

Consignia's commercial position	**With a universal service obligation**	**Without a universal service obligation**
With limited or no competition	A	B
With effective competition	C	D

Source: Postcomm

3.10 Postcomm recognises that this analysis, whilst appropriate to identifying and costing "loss-making" elements and to estimating the benefits (discussed further in Chapter 8) of providing a UPS, does not address how Consignia would efficiently support and finance its licensed activities (i.e. recover any "loss-making" services plus "unavoidable" costs) in the context of reduced volumes through the introduction of further competition in the market. In the context of Table 2, this would be represented as a move from quadrant A to quadrant C. Issues relevant to this consideration are discussed further in Postcomm's Chapter 3 of the consultation paper on competition.

Data used in this document

3.11 The data provided by Consignia relate to the financial year 1999/2000, the latest for which route-wise information is available. These data are based on the old domestic Royal Mail business unit and therefore exclude data for Parcelforce and international services. The revenues associated with these products collected through Post Office Networks (previously Post Office Counters Limited) are included in the route-wise data provided by Consignia. In addition, these data include estimates of the LRMC to counters of handling letters transactions. Otherwise costs associated with Post Office Networks are excluded.

3.12 Consignia's data are differentiated by six dimensions. These dimensions are further disaggregated by a number of sub-categories. Consignia has provided an estimate for average revenues and LRMCs for each combination of sub-category. In total there are 29,040 possible combinations. Consignia calls these combinations "routes". The dimensions (and the number of sub-categories within these dimensions) include:[8]

- the **distance** between collection and delivery point (x3);
- the type of **product or service** purchased, e.g. First Class Stamped Mail, Second Class Stamped Mail, Metered Mail (x22);

- **the size or format** of the item posted (x4);
- the type of **recipient**, i.e. residential or business (x2);
- the **density of delivery area**, e.g. Rural or Urban (x5); and
- the **weight** of the item posted (x11).

3.13 An example of a unique route is a First Class (product) letter (size), weighing less than 20g (weight), for delivery to a residential (recipient) address in a Rural (density) area over 100 miles away (distance).

3.14 Consignia has not been able to provide Postcomm with data on its long-run avoidable costs. As a proxy to long-run avoided costs Consignia, has provided Postcomm with estimates for its LRMCs associated with a variety of services. These LRMCs are intended to reflect the costs that Consignia would incur (or avoid) as a result of discrete changes in volumes, and therefore Consignia states that, for practical purposes, these costs could be regarded as avoidable. Consignia considers that these LRMC factors are robust to 30% increments/decrements in volume. On this basis, the level of costs that Consignia considers marginal accounts for about 60% of its total costs.

3.15 Consignia has described to Postcomm the high level methodology it adopts for deriving its estimates of LRMCs. LRMCs are either estimated with operational models or by expert judgement. There are around 25 operational models representing different processes/activities within Consignia's vertical supply chain. The operational models isolate the main elements within each activity and examine the cost drivers of these elements. The resulting marginal activity costs are then attributed to individual products. Non-directly attributable but marginal activity costs are allocated across products.

[8] Definitions of these dimensions are set out in Annex 1.

3.16 LRMCs for routes have been derived by taking the marginal activity costs relevant to a particular dimension of a route (e.g. distance) and allocating those marginal activity costs across the sub-categories of the dimension (e.g. across the three distance sub-categories). These costs are then attributed to a particular product in proportion to the allocation of that product's volume across the components of the route dimension.

3.17 Consignia provided the unit prices used in the analysis (1999/2000 prices). It should be noted that some of these prices may not necessarily be cost reflective.

Potential data limitations

3.18 Neither Postcomm nor Andersen has audited, or performed any other checks on, the data provided by Consignia. However based on a high level review, a number of potential limitations have been identified (refer to Annex 2 for a more detailed discussion on the LRMC data and their limitations). The potential limitations of the data and, where appropriate, Postcomm's approach to mitigating them are outlined below:

- product set: As stated above, the set of products for which Postcomm has route-wise data comprises 22 inland letter products. Other inland products, parcels and international letter services are excluded from the analysis. These products and their associated service standards do not relate directly to the definition of the UPS in the Act. To mitigate the latter issue, Postcomm has treated each product separately in the analysis;

- disaggregation of data: The structure of the data provided by Consignia is highly disaggregated and presented on a stylised route-wise basis. This high-level of disaggregation assumes that Consignia, in the absence of an obligation to provide the UPS, might choose (and indeed be able) to avoid the costs not just of whole product types but of individual mail items with very specific characteristics (defined by a combination of all the attributes above). If it were not be possible for Consignia to withdraw from some highly disaggregated "loss-making " mail items without also withdrawing from some

highly disaggregated profitable mail items, this might overestimate the NAC on a "route-wise" basis. To mitigate this issue, Postcomm has estimated the NAC for varying levels of aggregation within the data set provided by Consignia. However, at the aggregate level, e.g. product types, to the extent that some costs may be common across routes, more costs might be avoidable than the sum of route-wise data suggests (though Postcomm notes that Consignia uses, for planning purposes, aggregate LRMC factors that are not dissimilar from the sum of the route-wise data);

- data reconciliations: Postcomm understand that the data provided are on a different basis to Consignia's audited accounts. Postcomm has not determined whether these variances are appropriate and notes that they could distort the aggregate value of the loss[9]; and

- LRMC estimates: Postcomm has used Consignia's data on long-run marginal costs ("LRMCs") as a proxy for avoidable costs. These are the costs that Consignia considers to be "avoidable" through loss of volumes. Postcomm has not assessed to what extent Consignia's data would represent a reasonable estimate for efficient cost behaviour following reductions in volumes.

Summary

3.19 This chapter has discussed the general approach Postcomm has adopted to asses the costs of Consignia's provision of the universal service in the present market environment. In summary:

- the approach Postcomm has used is to compare the costs and revenues that Consignia would avoid if it withdrew from "loss-making" services. This approach has been used by other industry regulators; and

[9] The data provided are adjusted for fraud and underpayment, resulting in revenues that are higher than actual revenues (i.e. revenues in the audited accounts) and volumes for some products which are lower than measured volumes.

- the information provided by Consignia is highly disaggregated, which enables a very detailed assessment of the costs of providing specific combinations of services. However the resulting disaggregated data may not accurately reflect the practical ability of Consignia to avoid costs if it were permitted to do so.

C3. Question

a) Postcomm welcomes views on its approach adopted in this document (note also Postcomm's consultation document on promoting effective competition).

b) Postcomm welcomes views on how to mitigate the limitations in the data provided by Consignia, in particular, how Postcomm might view such limitations in the context of the emerging results.

4 An assessment of Consignia's "loss-making" services at an aggregate level

Outline of this chapter

4.1 Using the approach and data described in Chapter 3, this chapter considers:

- the breakdown of Consignia's mail volumes by the different dimensions set out in Chapter 3 (e.g. distance, product);
- whether Consignia offers certain products in aggregate, such as First and Second Class, at a "loss";
- whether Consignia offers deliveries to areas of certain densities in aggregate at a "loss"; and
- the characteristics of Consignia's customers (senders and recipients) (e.g. urban/rural or business/household).

Consignia's mail volumes

4.2 A breakdown of the base data provided by Consignia is set out in Table 3 (definitions of terms are set out in Annex 1 and a table summarising the key results of the analysis is included in Annex 3). Of the potential 29,040 routes, only 20,340 (or around 70%) are estimated to have experienced traffic in 1999/2000[10]. The total volume of mail delivered in 1999/00 for this product set was around 18.5 billion items. Table 3 suggests a number of relevant factors about the nature of Consignia's mail volumes. In particular:

[10] An "empty" route is one which has not been allocated volumes by Consignia.

- Distance: 47% of all mail volumes originate over 100 miles ("Distant") from the addressed destination;

- Product: the standard First and Second Class stamped service (Stamp 1 and 2) accounts for only 22% of mail volumes. Metered/Pre-paid First and Second Class accounts for a further 15% of mail volumes;

- Format: letters account for about 64% of mail volumes;

- Weight: most mail volumes (67%) lie below 50g and only 8% of mail is between 151g and 350g;

- Delivery density (classified by delivery point density): 60% of mail is delivered to City Centres and Urban areas; 22% is delivered to Suburban Urban areas; and 18% is delivered to addresses in Rural or Deep Rural areas; and

- Recipient: households receive 69% of all mail.

Table 3 – Dimensions of data provided by Consignia

Dimension	Disaggregation by cost driver and definition	Volume and % volume of items by dimension 1999/00
Distance item is sent (x3)	Local Neighbouring Distant	4,380m (24%) 5,331m (29%) 8,778m (47%)
Type of product/service purchased for item (x22)	Stamp 1 & 2 Meter/Pre-paid 1 & 2 Standard Tariff 1 & 2 Mailsort 1 & 2–direct Mailsort 1 & 2–ordinary Mail & flatsort 3-direct Mail & flatsort 3-ordinary Walksort 1 & 2 – direct Walksort 1 & 2 – ordinary Presstream 1 & 2 Flatsort/Packetsort/Packetpost 1 & 2 Response services 1 & 2	2,127m (12%) 1,816 (10%) 1,428m (8%) 1,243m (7%) 1,179 (6%) 1,828m (10%) 176m (1%) 929m (5%) 218m (1%) 1,546m (8%) 2,232m (12%) 1,738m (9%) 14m (0%) 191m (1%) 18m (0%) 324m (2%) 171m (1%) 466m (3%) 202m (1%) 153m (1%) 300m (2%) 191m (1%)
Size of item (x4)	Mechanised letter Manual letter Flat Packet	10,472m (57%) 1,307m (7%) 5,715m (31%) 994m (5%)
Type of recipient for product (x2) Density of delivery area (x5)	Business/firms Residential City Centre Urban Suburban Rural Deep Rural	5,667m (31%) 12,821m (69%) 4,592m (25%) 6,414m (35%) 4,154m (22%) 2,588m (14%) 740m (4%)
Weight of item (x11)	0-20g 21-40g 41-50g 51-60g 61-100g 101-150g 151-200g 201-250g 251-300g 301-350g 351g +	7,358m (40%) 3,939m (21%) 1,045m (6%) 1,159m (6%) 1,825m (10%) 1,267m (7%) 516m (3%) 451m (2%) 239m (1%) 342m (2%) 346m (2%)

Source: Consignia data; Andersen analysis
Note: Parts may not sum to 100% due to rounding

Do revenues for products cover their avoidable costs?

4.3 Table 4 sets out total revenues and contributions to "gross margin" for Consignia's products ("gross margin" equals total revenues minus the total avoidable costs given by the LRMC estimates). It shows that each product in aggregate contributes positively to Consignia's "gross margin". On this basis, no product in aggregate that is currently offered by Consignia can be said to be "loss-making" in the present market environment.

Table 4 – Summary of total revenues and contributions to "gross margin"

Product type	Total revenues (£m)	Share of total revenues	Contribution to "gross margin" (£m)	Share of total contribution to "gross margin"	Contribution to "gross margin" per unit
Stamp 1	608	13%	193	9%	0.09
Stamp 2	385	8%	105	5%	0.06
Meter/Pre-paid 1	501	11%	217	10%	0.15
Meter/Pre-paid 2	300	6%	110	5%	0.09
Standard Tariff 1	424	9%	198	9%	0.17
Standard Tariff 2	450	10%	186	8%	0.10
Mailsort 1 –direct	52	1%	38	2%	0.22
Mailsort 2–direct	206	4%	124	6%	0.13
Mailsort 1 –ordinary	64	1%	47	2%	0.22
Mailsort 2–ordinary	342	7%	207	9%	0.13
Mail & flatsort 3-direct	402	9%	227	10%	0.10
Mail & flatsort 3-ordinary	313	7%	177	8%	0.10
Walksort 1 – direct	2	0%	1	0%	0.09
Walksort 2 – direct	22	0%	8	0%	0.04
Walksort 1 – ordinary	3	0%	2	0%	0.09
Walksort 2 – ordinary	37	1%	13	1%	0.04
Presstream 1	46	1%	[REDACTED]	[REDACTED]	[REDACTED]
Presstream 2	202	4%	[REDACTED]	[REDACTED]	[REDACTED]
Flatsort/ Packetsort/ Packetpost 1	141	3%	65	3%	0.32
Flatsort/ Packetsort/ Packetpost 2	90	2%	50	2%	0.32
Response services 1	94	2%	[REDACTED]	[REDACTED]	[REDACTED]
Response services 2	40	1%	[REDACTED]	[REDACTED]	[REDACTED]
Total	**4,724**	**100%**	**2,196**	**100%**	

Source: Consignia data; Andersen analysis

Do revenues for various delivery densities cover their avoidable costs?

4.4 Table 5 shows a breakdown of revenue and contributions to Consignia's "gross margin" of all mail items posted to areas of different delivery density. It shows that all delivery densities contribute positively to Consignia's aggregate "gross margin". Consignia's figures imply that delivery to Rural and Deep Rural areas is not a "loss-making" activity in aggregate.

4.5 On a per unit basis, there appears little difference in the "contribution" made by deliveries to addresses in City Centres, Urban, and Suburban areas. However, Rural and Deep Rural routes make a slightly smaller contribution to "gross margin".

Table 5 – Total revenue and contributions to "gross margin" for density of delivery

Delivery Density	Total revenue (£m)	Share of total revenue	Contribution to "gross margin" (£m)	Share of total contribution to "gross margin"	Contribution to "gross margin" per unit
City Centre	1,173	25%	571	26%	0.12
Urban	1,639	35%	785	36%	0.12
Suburban	1,061	22%	510	23%	0.12
Rural	661	14%	259	12%	0.10
Deep Rural	189	4%	70	3%	0.09
Total	**4,724**	**100%**	**2,196**	**100%**	

Source: Consignia data; Andersen analysis

4.6 The relative profitability of different delivery densities will depend on the degree of aggregation used (see Annex 2 for details on the aggregation of data). Certain deliveries within the specified delivery density may be "unprofitable". For example, there may be identifiable fragments of loss if the Rural and Deep Rural categories are further disaggregated by product or weight of item. Chapter 5 considers the size of the "loss-making" elements further, should a greater disaggregation be used than in the totals given for Consignia's products and classification of delivery densities.

4.7 While recognising that the construction of the data used reflects Consignia's own representation of its business, Postcomm notes that a less "stylised" view and a more physically derived data set than Consignia's might produce different results. For example, Consignia may be able to efficiently avoid more costs than the sum of the route-wise data suggests because it might be able to avoid some costs that are common across individual routes. If a higher level of aggregation across volumes meant that more costs became avoidable, this might increase the NAC compared to the highly disaggregated results above (see Chapter 7 for sensitivities). On the other hand, the more costs become avoidable, the less the potential impact on Consignia's profitability of falling volumes (for example brought about by competition).

Customer characteristics

4.8 In considering the nature of UPS provision it is instructive to consider the origin of mail flows. Consignia has been unable to provide information on the origin of its mail volumes. However, some data are available at the EU level, as shown in Table 6. This is taken from a study by CTcon in 1998 for the European Commission. Assuming the UK mail volume patterns are representative of the EU average, this suggests that the overwhelming majority of mail is of Urban origin and destination (63%).

Table 6 - The flow of EU mail sent and received by delivery density

Mail Flow	**Traffic volume %**
Urban to Rural	18
Urban to Urban	63
Rural to Rural	6
Rural to Urban	13

Source: CTcon study [11]

4.9 Table 7 below shows EU data for the flows between businesses and households. Again, assuming that Consignia's mail volumes are broadly representative of the

EU average, only 8% of mail involves household to household correspondence with the overwhelming majority (92%) of mail relating to commercial activity.

Table 7 - EU business/household mail flows

Mail Flow	**Traffic volume %**
Business to Household	55
Business to Business	31
Household to Household	8
Household to Business	6

Source: CTcon study (same reference as Table 6)

Summary

4.10 This chapter has considered whether certain products or deliveries to certain density areas are "loss-making" in aggregate in the sense that their revenues do not cover LRMC (which serves as a proxy for long-run avoidable costs). It found that:

- all products in the data set analysed contribute positively to Consignia's "gross margin" and therefore no product in itself can be said to be "loss-making";
- all delivery density areas contribute positively towards Consignia's "gross margin"; however
- it is possible that within these product and delivery density groupings there may be "loss-making" elements of provision. This is the subject of Chapter 5.

[11] A copy of this study, "Study on the weight and price limit of the reserved area in the postal sector" can be found on the European Commissions web-site: www.europa.org.

C4.	**Question**
a)	**Postcomm welcomes views on the analysis and conclusions drawn in this chapter.**

5 An assessment of Consignia's "loss-making" services at a route-wise level

Outline of this chapter

5.1 Chapter 4 assessed the cost of Consignia's provision of the universal service at an aggregate level. This chapter considers:

- the nature and total cost of the "loss-making" elements at a more disaggregated route-wise level;
- how the total cost of the "loss-making" routes changes if a narrower range of Consignia's products, such as Second Class only, were regarded as forming the universal service; and
- a contextualisation of the findings.

The cost of "loss-making" routes

5.2 As noted in Chapter 4, it is possible that the aggregate data could conceal some particular combinations of services that may be "loss-making" (e.g. the delivery of some Second Class letters weighing less than 20g to City Centre business customers). This occurrence of elements of "loss" within the wider provision of profitable services is common in network-based industries and operations where a "national" presence is an important business asset. Therefore, there may be elements of "loss" at a route-wise level that Consignia cannot avoid. However, the most disaggregated view might represent the maximum potential cost for the sum of current "loss-making "routes across all inland letter services. Table 8 shows a total potential cost of £81m across all the routes where revenue does not cover long-run marginal costs. It may be appropriate to view this potential cost against Consignia's total operating profit (after taking account of these 'losses') of £381m

in 1999/2000[12]. The sum of the "loss-making" elements equates to about 1.7% of Consignia's total mail revenues for the set of 22 inland letter products.

5.3 Of the 20,340 utilised routes, 3,290 or 16% incurred a loss in the sense that revenues do not cover the LRMC of providing those services.

Table 8 – "Loss-making" routes provided by Consignia

	Total for all routes	Routes that are "loss-making"	Routes that are "loss-making" as % total routes
Consignia "gross margin" (revenue for routes minus avoided cost) (£m)	2, 196	-81	4%
Consignia revenue (£m)	4,724	232	5%
Number of Consignia routes (utilised routes)	20,340	3,290	16%
Consignia volumes (m)	18,488	982	5%

Source: Consignia data; Andersen analysis

5.4 The sum of the "loss-making" elements of universal service of £81m (1999/2000) can be compared to the NAC estimate from the NERA study for the European Commission of £22.6m (1996/1997). As NERA also did not include an estimation of the benefits of universal service provision, the difference is likely to largely result from the degree of aggregation adopted and the different base years. The European Commission relied on aggregated delivery office costs, while the analysis for this document uses information provided by Consignia on a route-by-route basis. The greater the level of disaggregation, the higher the estimate of potential avoided cost will be due to the finer identification of "loss-making" routes and the potentially avoidable components of universal service provision, assuming

[12] In addition, Consignia offers a number of free of charge services. These include internal post, and letters of petition to the Houses of Parliament and the Queen (it has been estimated that the revenue

the categorisation of costs to individual services as common, joint and attributable remains unchanged.

5.5 Of the routes that contributed negatively to Consignia's "gross margin" in 1999/2000, the majority of the loss was highly concentrated in a small number of routes. This is shown in Table 9, which shows the cumulative contribution towards the cost of £81m. It shows that of the 3,290 NAC routes, only 20 generate 10% of the total losses, whilst 273 generate 50% of the total losses.

Table 9 – Concentration of total value of the "loss-making" routes

Percentile	Contribution towards the potential avoided cost (£m)	Number of routes generating the loss
100%	81.1	3,290
90%	73.0	1,249
80%	64.9	841
70%	56.7	584
60%	48.6	403
50%	40.5	273
40%	32.4	176
30%	24.3	104
20%	16.2	54
10%	8.1	20

Source: Consignia data; Andersen analysis

The potential avoided cost of Second Class Mail only

5.6 For a discussion on the interpretation of the USO, refer to the consultation document on promoting effective competition. It suggests that there could be an interaction between the scope of the universal service and the degree to which competition can be introduced.

5.7 The figures above include all 22 of Consignia's main products as listed in Table A1.1. If, for example, only Second Class post was viewed as the universal service inland letter product, then the total potential avoided cost for Consignia of providing the UPS would be different from the estimates above. A summary of all the routes, involving Second Class post, making a negative contribution to

foregone from these activities is about £20m per year).

Consignia's "gross margin" is set out in Table 10. It shows that the potential burden of providing the UPS, if it is defined as the elements of loss within the provision of Second Class post, is about £34m, or 3.0% of Second Class revenues[13].

Table 10 – Total potential avoided cost of the universal service defined as Second Class[14] only, 1999/00

	Total for all routes	Routes that are "loss-making"	Routes that are "loss-making" as % total routes
Consignia "gross margin" (revenue for routes-avoided cost) (£m)	401	-34	8%
Consignia revenue (£m)	1,135	81	7%
Number of Consignia routes	3,720	879	24%
Consignia volumes	4,887	400	8%

Source: Consignia data; Andersen analysis

5.8 If the scope of the universal service covers both First and Second Class post, this would raise the total potential avoided cost of providing the universal service to £70m. This represents about 1.5% of Consignia's total mail revenues for the set of 22 inland letter products.

5.9 As stated in Chapter 3, this potential burden of Consignia's provision of the UPS is calculated based on current service standards, which are higher than those standards specified in the Act and by the European Commission.

[13] The calculation is made under current conditions and does not make any assessment of potential switching of customers from one product to another.
[14] Second Class here refers to Stamped 2 products, Metered, Pre-Paid and Standard products.

5.10 Although the analysis above suggests that Consignia's aggregate provision contains within it elements of loss, this cannot be said to contribute towards the NAC of universal service provision unless the service could, and would, be withdrawn if the universal service obligation were removed. This issue is particularly relevant given the high degree of disaggregation of Consignia's data. It is, therefore, necessary to consider where the "loss-making" elements of service are, in order to assess whether they are avoidable. This point is considered in Chapter 6.

Summary

5.11 This chapter has made the following observations:

- on a disaggregated basis, the cost of Consignia's universal service provision - measured as the total potential avoidable cost of "loss-making" elements across all its mail products - is about £81m. This represents about 1.7% of Consignia's total revenues for the corresponding product set;

- this cost is highly concentrated in a relatively few number of routes, with 273 routes (about 1% of the total utlised routes) representing 50% of the £81m;

- if restricted to Second Class postal products this cost falls to about £34m, which is about 8% of Second Class revenue and less than 0.1% of total mail revenue for the 22 product set. The total potential avoidable cost associated with the UPS for First and Second Class post is about £70m; and

- given that routes are relatively small subsets of certain products and delivery density areas, it is important to consider whether the "loss-making" elements can be avoided by Consignia in the absence of a universal service obligation. If not, these services cannot be said to contribute towards the 'cost' of the universal service. This issue is discussed further in the next chapter.

C5.	**Question**
a)	**Postcomm welcomes views on the analysis outlined and conclusions drawn in this chapter.**

6 Identification of particular services contributing to Consignia's "loss-making" services

Outline of this chapter

6.1 Chapter 5 discussed the extent of the potential cost incurred by Consignia as a result of pricing below avoidable costs across its range of inland letter products. This chapter identifies the specific volumes that contribute to this cost. In particular this chapter considers:

- which particular routes provided by Consignia contribute towards the total avoided cost of the UPS identified in Chapter 5; and
- the nature of the routes that contribute towards Consignia's "gross margin".

Identification of "loss-making" services

6.2 To identify the incidence of unprofitable routes, Postcomm has compared the percentage share of the £81m loss that is generated by the particular dimensions and the sub-categories within these dimensions, for example, the percentage of the £81m net avoided cost that is generated by Stamp1 compared to Walksort 1 - Direct. This is set out in Table 11. The results suggest that the "loss-making" elements are spread across the sub-categories of each dimension, although areas of particular loss include First or Second Class, Manual Letters, items weighing less than 40g and items sent to a residential recipient.

6.3 Table 11 shows that all five delivery densities make a significant contribution to the total net avoided costs. However, the variability in NAC between delivery densities partly reflects the different level of volumes conveyed to each density. Annex 3 indicates that Deep Rural represents 6% of the potential avoided cost of £81m, compared to its 4% of mail volumes, and Urban represents 33%, compared to its 35% of mail volumes. Overall, the "loss-making" elements

appear to be fairly evenly distributed across delivery densities when compared to mail flows.

Table 11 – Share of the total potential avoided cost of the universal service

Dimension	Disaggregation by cost driver and definition	% share of potential avoided cost of £81m
Distance item is sent (x3)	Local Neighbouring Distant	34% 30% 36%
Type of product/service purchased for item (x22)	Stamp 1 & 2 Meter/Pre-paid 1 & 2 Standard Tariff 1 & 2 Mailsort 1 & 2–direct Mailsort 1 & 2–ordinary Mail & flatsort 3-direct Mail & flatsort 3-ordinary Walksort 1 & 2 – direct Walksort 1 & 2 – ordinary Presstream 1 & 2 Flatsort/Packetsort/Packetpost 1 & 2 Response services 1 & 2	24%, 16% 10%, 9% 10%, 17% 0%, 1% 0%, 1% 1% 1% 0%, 0% 0%, 0% 0%, 0% 5%, 1% 2%, 2%
Size of item (x4)	Mechanised letter Manual letter Flat Packet	0% 63% 1% 36%
Type of recipient for product (x2)	Business/firms Residential	27% 73%
Density of delivery area (x5)	City Centre Urban Suburban Rural Deep Rural	23% 33% 21% 18% 6%
Weight of item (x11)	0-20g 21-40g 41-50g 51-60g 61-100g 101-150g 151-200g 201-250g 251-300g 301-350g 351g +	36% 30% 14% 11% 8% 1% 0% 0% 0% 0% 0%

Source: Consignia data; Andersen analysis

Differences in losses by delivery density and distance

6.4 Table 12 shows the net avoided cost by delivery density and route distance. This reveals a fairly even distribution of "loss-making" elements across delivery density and distance.

Table 12 – Potential avoided cost by delivery density and distance

	By distance between sender and address (£m)				
Delivery Density	**Local**	**Neighbouring**	**Distant**	**Total**	**% of total**
City Centre	-6.3	-5.6	-6,6	-18.5	23%
Urban	-9.0	-8.1	-9.4	-26.5	33%
Suburban	-5.8	-5.2	-6.1	-17.1	21%
Rural	-4.9	-4.4	-5.2	-14.5	18%
Deep Rural	-1.5	-1.3	-1.6	-4.5	6%
Total	**-27.5**	**-24.7**	**-28.9**	**-81.1**	**100%**

Source: Consignia data; Andersen analysis

6.5 Table 13 shows "loss-making" routes broken down by density and products. For clarity Postcomm has only presented results for those products with a potential avoided cost greater than £0.5m. This suggests that the majority of losses (£70m or 86%) are associated with First and Second Class products, i.e. Stamp, Meter/Pre-paid and Standard Tariff products. In addition, Table 13 shows that the significant portion of the losses incurred by these products are incurred on Urban routes with the Deep Rural routes incurring the lowest losses. This however is in line with the overall volume distribution across delivery densities, i.e. Urban experiences the most traffic while Deep Rural experiences the least traffic. There is little loss associated with Mailsort, Walksort and Presstream products, which have been excluded from the table.

Table 13 – Potential avoided cost on "loss making" routes broken down by density and product, for products with an avoided cost of greater then £0.5m only (£m's)

Density	Stamp 1	Stamp 2	Meter/Pre-paid 1	Meter/Pre-paid 2	Standard tariff 1	Standard tariff 2	Mailsort 2 – ordinary
City Centre	-4.4	-3.0	-1.9	-1.6	-1.9	-3.2	-0.1
Urban	-6.4	-4.3	-2.8	-2.4	-2.7	-4.5	-0.2
Suburban	-4.1	-2.8	-1.8	-1.5	-1.7	-2.9	-0.1
Rural	-3.3	-2.3	-1.5	-1.2	-1.5	-2.4	-0.2
Deep Rural	-1.0	-0.7	-0.5	-0.4	-0.5	-0.7	-0.1
Total	**-19.2**	**-13.2**	**-8.5**	**-7.2**	**-8.2**	**-13.7**	**-0.7**

Density	Mailsort & Flatsort 3 - direct	Mailsort & Flatsort 3 – ordinary	Flatsort/ Packetsort/ Packetpost 1	Flatsort/ Packetsort/ Packetpost 2	Response Services 1	Response Services 2	Total
City Centre	-0.2	-0.1	-0.9	-0.2	-0.3	-0.5	**-18.5**
Urban	-0.3	-0.2	-1.3	-0.2	-0.5	-0.7	**-26.5**
Suburban	-0.2	-0.1	-0.8	-0.2	-0.3	-0.4	**-17.1**
Rural	-0.2	-0.2	-0.8	-0.1	-0.3	-0.3	**-14.5**
Deep Rural	-0.1	-0.1	-0.2	0.0	-0.1	-0.1	**-4.5**
Total	**-1.0**	**-0.8**	**-3.9**	**-0.7**	**-1.4**	**-2.0**	**-81.1**

Source: Consignia data; Andersen analysis

Note: detail will not equal total due to the omission of products with a potential avoided cost of less than £0.5m.

6.6 Table 14 shows the delivery density of "loss-making" routes broken down by size and format of item posted. Manual letter and Packet products experience the highest incidence of "loss", which, as demonstrated in Annex 3, is disproportionate to the proportion of overall volumes of these two product sizes.

Table 14 – Potential avoided cost of "loss-making" routes broken down by delivery density and size (£ millions)

Density	Mech letter	Manual letter	Flat	Packet	Total
City Centre	0.0	-11.9	-0.1	-6.5	**-18.5**
Urban	0.0	-17.1	-0.1	-9.4	**-26.5**
Suburban	0.0	-11.0	-0.1	-6.0	**-17.1**
Rural	0.0	-8.7	-0.1	-5.7	**-14.5**
Deep Rural	0.0	-2.6	-0.1	-1.8	**-4.5**
Total	**0.0**	**-51.3**	**-0.4**	**-29.3**	**-81.1**

Source: Consignia data; Andersen analysis

6.7 Table 15 shows the potential avoided cost broken down by density and weight. This shows that most of the "losses" are below 40g.

Table 15 – Potential avoided cost by delivery density and weight of item (£m)

Density	0-20	21-40	41-50	51-60	61-100	101-150	150+	Total
City Centre	-6.9	-5.5	-2.5	-2.1	-1.4	-0.1	0.0	**-18.5**
Urban	-9.8	-7.9	-3.6	-3.1	-2.0	-0.1	0.0	**-26.5**
Suburban	-6.3	-5.1	-2.3	-2.0	-1.3	-0.1	0.0	**-17.1**
Rural	-5.0	-4.2	-2.1	-1.6	-1.4	-0.2	0.0	**-14.5**
Deep Rural	-1.5	-1.3	-0.6	-0.5	-0.4	-0.1	0.0	**-4.5**
Total	**-29.5**	**-24.0**	**-11.2**	**-9.3**	**-6.5**	**-0.6**	**0.0**	**-81.1**

Source: Consignia data; Andersen analysis

6.8 The distribution of the "loss-making" volumes across dimensions is compared to the distribution of total volumes across dimensions in Annex 3. A breakdown of contribution to "gross margin" is also set out in Annex 3. This analysis suggests that:

- local "loss-making" volumes are disproportionately high;
- Stamp and Standard Tariff "loss-making" volumes are disproportionately high;
- Manual letter and Packet "loss-making" volumes represent 97% of the total "loss-making" volumes; and
- the distribution of "loss-making" volumes by delivery density is fairly similar to the distribution of the total volume by delivery density.

6.9 The high incidence of Manual letters and Packets in "loss-making" volumes may be an indication of prices that are not fully reflective of costs.

Avoidability of services

6.10 Chapter 5 highlighted the importance of considering whether the routes considered "loss-making" could and would be avoided by Consignia. There are three main possibilities for avoidance of loss:

- eliminating the route entirely;
- increasing the tariff for that route; and
- increasing efficiency on that route so that the loss is eliminated.

6.11 Postal operators do not offer distinct routes but do offer distinct products. Every product that warrants a defined tariff can be segregated from other forms of traffic at some point in the value chain. This enables traffic, as defined by the conditions published for the product concerned, to be handled separately at some stages of

the value chain and, therefore, to be charged a tariff that reflects handling costs in some measure.

6.12 First and Second Class mail are separated at the earliest possible stage as First Class mail receives priority handling. Pre-sorted bulk mail under Mailsort and Walksort is kept separate from the point of access to the network onwards because sorting (both outward and inward) is substantially reduced given that senders have done a large part of the work already in order to qualify their mail for the discounted tariffs. Printed Impressions mail is kept separate from stamped mail because it does not need facing and cancelling. Recorded delivery mail is kept in separate bags at the point of access, handled in secure areas, and each item is recorded as it passes through the operational chain. It joins other mail only at the final delivery stage and requires a signature of receipt.

6.13 This discussion highlights that although most products can be, and indeed need to be, segregated at some point in the value chain, this may not be the same for "routes". This discussion questions whether routes within the First Class service are "avoidable". This is because a postal operator may not have the means to provide 700 different forms of handling and segregation for this product to ensure that every "route" is profitable. As noted in Chapter 2, some 50 per cent of volume is cleared from pillar boxes or from post offices and their agencies so, at this level, the prospect of this traffic then being segregated into routes would appear to be impractical.

6.14 It is noticeable from the analysis in Tables 13 through to 17 that the potential avoidable cost is widely distributed across the routes. This therefore raises the questions of the degree to which some of these services ought to be included within the calculation of the 'net cost' of the universal service as they might not be avoidable and open to segregation in practice. Although, Postcomm has concerns over the disaggregation of the data, it has not sought to adjust the figures.

Summary

6.15 This chapter has suggested that the total potential avoided cost from all services of £81m is likely to be characterised by:

- First and Second class products, which account for 86% of losses;
- Manual letters, which represent 63% of the value of the "loss-making" elements;
- an incidence of loss which is fairly evenly distributed across delivery densities, although in absolute terms Deep Rural contributes the least to the overall loss; and
- a high degree of disaggregation of the data in routes which raises an issue of whether some of the "loss-making" routes are not avoidable costs and therefore should be excluded from the calculation of the net cost of the universal service.

C6.	**Question**
a)	**Postcomm welcomes views on the analysis and conclusions drawn in this Chapter and, in particular, invites comments on whether it has identified the relevant characteristics of any potential NAC.**

7 Sensitivities around results

Outline of this chapter

7.1 Chapters 4, 5 and 6 considered Consignia's potential avoided cost of providing the universal service in terms of the present market structure. This chapter attempts to consider how that analysis might change in the light of changes in Consignia's behaviour and business practices. This is simulated through a number of sensitivities. In particular this chapter considers the following sensitivities:

- variations in the degree to which costs in aggregate are deemed avoidable; and
- variations in prices.

Sensitivity to changes in LRMCs

7.2 Consignia has calculated its LRMCs to be about 60% of its total costs. Table 16 shows the effects on the total net avoided cost of the "loss-making" services to relatively small changes in this assumption. The LRMC factors for each process in Consignia's value chain have been varied by between +5% and –5%, both individually and collectively. This shows that a reduction of 5% (to an LRMC accounting for 57% of total costs) would reduce the potential cost of the "loss making" routes to £65.7m, whilst an increase of 5% (to a LRMC accounting for 63% of total costs) would increase the potential cost of the "loss-making" routes to £97.1 million.

Table 16 - Effect of changes to LRMC on the potential avoided cost (£ million)

Adjustment	Potential avoided cost
-1%	77.9
-5%	65.7

+1%	84.2
+5%	97.1

Source: Consignia data; Andersen analysis

7.3 Larger LRMC sensitivites have also been considered since, over time, potentially large adjustments could be made to costs, particularly in response to network re-optimisation[15]. For example, if Postcomm were to assume that 80% of total costs were avoidable, the total value of the "loss-making" routes would increase to about £219m. In extremis, if all costs were perfectly attributable and avoidable (so LRMC= 1.0) this would lead to a cost of the "loss-making" routes of £539m. The detailed results of this sensitivity are set out in Table 17.

Table 17 - Sensitivity of net avoided cost to large changes in LRMCs

Adjusted LRMC factor	**Net avoided cost of the "loss-making" routes £**
0.6	81m
0.7	138m
0.8	219m
0.9	344m
1.0	539m

Source: Consignia data; Andersen analysis

Sensitivity to changes in price

7.4 In a more competitive environment, downward pressure may be put on the prices that Consignia might charge. Postcomm has recalculated the "loss-making" routes after reducing all prices on the base year of data by 5.1% to simulate the effective rolled-forward impact of a two-year nominal price freeze assuming inflation of 2.5% and no cost efficiencies in real terms. As Table 18 shows, the total potential avoided cost of the "loss-making" routes increases from £81m to £92.6m. Table 18 only shows the increase in the potential avoided cost of those products with an initial avoided cost greater then £1m.

[15] Annex 2 discusses the extent to which Consignia's LRMC estimates already include a degree of network re-optimisation.

Table 18 – The effects of re-pricing (downwards) on the total potential avoided cost (products with a potential avoided cost greater than £1m only)

Product	Base potential avoided cost of "loss-making" routes	Rebased potential avoided cost of "loss-making" routes	% change
Stamp 1	-19.2	-21.9	14%
Stamp 2	-13.2	-14.7	11%
Meter/Pre-paid 1	-8.5	-9.8	15%
Meter/Pre-paid 2	-7.2	-8.0	12%
Standard Tariff 1	-8.2	-9.7	18%
Standard Tariff 2	-13.7	-15.3	12%
Mail & flatsort 3-direct	-1.0	-1.1	12%
Flatsort/Packetsort/Packetpost 1	-3.9	-4.6	17%
Response services 1	-1.4	-1.8	27%
Response services 2	-2.0	-2.2	11%
Total	**-81.1**	**-92.6**	**100%**

Source: Consignia data; Andersen analysis

Note: detail will not equal total due to the omission of products with a potential avoided cost of less than £1m.

7.5 Many of the services provided by Consignia to its business customers have some type of discount associated with them. Some of these discounts reflect cost differences through such schemes as workshare. To consider the potential impact of discounts on the calculation of the NAC, it is helpful to note the effect of raising prices on services that are currently priced below the Second Class Stamp rate up to that level[16]. The results of this price increase is a marginal reduction of the avoided cost to £78.9 million, with only a few products experiencing a decrease in their NAC.

[16] For the purpose of this sensitivity Postcomm has assumed that the Second Class Stamp price is cost reflective and represents an "affordable" price for Consignia.

Summary

7.6 The chapter has made the following observations:

- increasing all LRMCs by 5% will increase the total potential avoided cost of the "loss-making" routes to £97.1 million;
- reducing prices by about 5% to reflect a potential competitive response by Consignia will increase the potential avoided losses to £92.6 million; and
- raising price levels to the Second Class Stamp price (i.e. removing the effects of discounts) will reduce the potential avoided costs to £78.9 million.

C7.	**Question**
a)	**Postcomm welcomes views on the analysis and conclusions drawn in this Chapter. In particular, Postcomm invites views on whether other sensitivities should be considered.**

8 The potential benefits of universal service provision

Outline of this chapter

8.1 In addition to the potential avoided costs incurred by providing a universal service, Consignia may also benefit from this provision in certain ways. These benefits have not been included in the analysis of potential avoided costs as set out in Chapters 2-7. They are discussed in this chapter, and the following analysis follows closely the methodology used by OFTEL when assessing the benefits of the telecommunications universal service obligation. These benefits can be summarised as relating to:

- brand enhancement and corporate reputation;
- Special Privileges;
- avoidance of transaction costs;
- ubiquity;
- customer life cycle effects; and
- public affairs.

Brand enhancement and corporate reputation

8.2 Benefits could accrue to a universal service provider from the effect that serving uneconomic areas and customers has upon the operator's brand image and corporate reputation generally, and hence upon its overall current and future profitability. Providing the UPS may also increase customer confidence, and this market positioning may be a competitive advantage because it signals to new

entrants that competition cannot prevent Consignia from occupying a significant niche in the market.

8.3 Postcomm recognises that certain business customers may value a single provider and prefer to enter into bulk contracts with universal service providers in order to be certain of reaching all members of society. This preference casts doubt upon the genuine "avoidability" of "loss-making" elements within the provision of these postal products.

8.4 Brand enhancement or value may be thought of as the cost of advertising and marketing that the universal service provider would otherwise have to undertake to achieve the same effect on its brand enhancement as from the provision of a UPS. Withdrawing from UPS activities might damage Consignia's corporate reputation. In the Government's White Paper on Post Office Reform, market research is cited suggesting that "The Post Office" is the second most widely recognised brand in the UK after Coca-Cola. Some of this benefit may be derived from its provision of the universal service. Another brand benefit might be derived from Consignia's network of pillar boxes and post offices, which might contribute to promoting Consignia and its products. OFTEL found that public telephone boxes offered a similar benefit to British Telecom.

8.5 Although Postcomm has not sought to estimate these benefits, one means of doing so would be to equate it to a proportion of Consignia's annual marketing and advertising spending. This was the approach adopted by OFTEL in its initial review of the costs of the telecommunications universal service. OFTEL equated this benefit to approximately 20% of BT's marketing and advertising spends.

Special Privileges

a) VAT

8.6 Consignia is exempt from paying VAT. Some have argued that this gives it a competitive advantage over rival operators that do not benefit from such an exemption. VAT charged by private operators may be offset against other spend allowing business customers to reclaim VAT paid. However, financial institutions, charities and residential customers are not able to reclaim VAT. In any event, the process of claiming money back adds transaction costs to customers and competitors in a way that Consignia as the universal service provider can avoid. If Consignia did not have this VAT exemption its prices might increase and it might lose volumes to alternative operators and other means of communication.

b) Customs and Excise

8.7 Customs and Excise regulations currently exempt Consignia's "Royal Mail" operations from the usual customs regulations in relation to Universal Postal Union mail carried under a universal service obligation. This facilitates the passage of Consignia international postal packets through the postal system whilst at the same time allowing Customs and Excise, either itself or through Consignia, to secure payment of all outstanding duties. Private operators on the other hand are subject to general import/export trade customs control and documentation requirements, which they claim involve considerable added costs.

c) Parking exemptions

8.8 While there is no general exemption from traffic regulations for Consignia, there are many exemptions written into Local Traffic Orders for Royal Mail liveried vehicles engaged in the collection and delivery of mail.

8.9 Postcomm has said in its Business Plan that it intends to review Consignia's Special Privileges.

Avoidance of customer transaction costs

8.10 Lower transaction costs are often cited as a benefit of providing a UPS at a uniform tariff. Certain customers may not want to invest time in determining the correct rate for low value items, the uniform tariff saving transaction costs of both customers and Consignia. Therefore, although moving to non-uniform prices may be cost reflective, it might not be the most cost-effective option for a universal service provider such as Consignia. For example, extra costs could be incurred from customer confusion and the generation of more enquiries and call centre traffic.

Ubiquity of service

8.11 The provision of a universal postal service might provide beneficial effects based on customer awareness that, even when they move to a new address, Consignia will supply a service. At the new location the customer may not know of potential competitors. As a result of this lack of knowledge, a proportion of customers will choose Consignia over alternative suppliers where they are available.

8.12 Another benefit arising from ubiquity derives from the likelihood that customers will choose to use Consignia when sending mail to wide ranging or new addresses given that, by virtue of the universal service obligation, they can be sure that Consignia will deliver to all addresses. In this sense, ubiquity may also serve to reduce customer switching.

Customer life cycle benefits

8.13 The "loss-making" services in the previous chapters may include deliveries to addresses and customers that are likely to generate "outward" flows of mail that will be profitable. Hence, taken in the round, the delivery point/customer may indeed be profitable overall and if Consignia chose not to deliver to the unprofitable elements, it would lose revenue from the profitable elements.

Public affairs

8.14 Some rival operators have argued that there may be benefits associated with being the universal service provider in terms of Consignia's views being given extra weight in the formation of policy by Government.

Summary

8.15 It is difficult to quantify the potential benefits that Consignia might receive by virtue of being the universal service provider. However, such benefits would need to be subtracted from the sum of the "loss-making" elements (up to £81m) in order to arrive at a more balanced judgement on the degree to which Consignia may be (dis)advantaged by its licence obligation to ensure a universal service at an affordable uniform tariff.

C8.	**Question**
a)	**Postcomm welcomes views on whether it has accurately identified the scope of potential benefits that Consignia may enjoy from being a universal service provider.**
b)	**Postcomm would also welcome views on approaches to quantifying such benefits in order to arrive at a balanced consideration on the net costs and benefits of providing the universal service, and on evidence that will support the quantification of benefits.**

9 Conclusions and next steps

Outline of this chapter

9.1 This document has sought to present analysis to assess the potential costs to Consignia of providing a universal service. It has also sought to identify whether there are any countervailing benefits that ought to be considered. This chapter discusses the results of this analysis and Postcomm's potential next steps.

Emerging results

9.2 Based on the methodology and Consignia's data described above, the following results emerge:

- each of the 22 product types contained in the data set (e.g. First Class, Second Class, Flatsort, etc.) covers its long-run marginal costs in aggregate. The "margin" on individual products varies markedly. Among the products for which information is presented, Second Class (Stamped) has one of the lowest "margins" of revenue less avoidable costs (6p per unit), while Flatsort/Packetsort/Packetpost 1 and 2 have the highest (32p per unit). Thus at the level of whole product types, the NAC of the UPS, before any wider benefits are included, is zero;

- each of Consignia's delivery density categories (City Centre, Urban, Suburban, Rural and Deep Rural) has a positive "margin" in aggregate before any wider benefits are included. Moreover, the "margin" per unit is fairly constant across all delivery densities;

- each distance, size, and weight step, and each type of recipient (business and residential), also has a positive "margin" in aggregate before any wider benefits are included;

- at the most disaggregated route-wise level (i.e. taking combinations of ***all*** of the attributes identified above) around 16% of routes exhibit a net avoidable cost (before any wider benefits are included). For example, the NAC on a route-wise basis for Second Class only (defined as Stamped 2, Metered/Pre-paid 2 and Standard Tariff 2) is £34m. Across all 22 inland letter products the total NAC is £81m; and

- Consignia may enjoy some wider commercial benefits from its status as a universal service provider, which should be set against the NAC results above. Postcomm has not quantified these benefits, but they might include benefits associated with brand enhancement and corporate reputation, Special Privileges such as VAT exemption, and avoidance of customer transaction.

9.3 On the basis of the NAC methodology and the data provided by Consignia, the highly disaggregated estimate for the NAC across all products is equivalent to an average price mark-up of just over 1.5% or around one fifth of Consignia's 1999/2000 operating profits. However, the current cost of the universal service is unlikely to be greater and could be less than this for the following reasons:

- the analysis considers the entire range of 22 products provided by Consignia's inland letters business, which are generally provided at service standards higher than the minimum requirement of the UPS under the Act, and includes Presstream which Consignia do not regard as part of the UPS;

- there is no quantification of the wider benefits that Consignia might enjoy by being a universal service provider. These benefits may not need to be large relative to Consignia's turnover to offset the NAC across all routes;

- to the extent that it would not be practically possible or commercially viable for Consignia to withdraw from some highly disaggregated "loss-making" mail items without also withdrawing from some highly disaggregated profitable mail items, this might overestimate the NAC on a "route-wise" basis; and

- the data have not been adjusted to reflect efficient cost levels.

9.4 Postcomm notes that a previous estimate of the cost of Consignia's UPS by consultants employed by the European Commission, amounted to £22.6m for the financial year 1996/1997. This analysis also did not quantify the benefits of universal service provision, but did use more aggregated data, which is likely to be a major contributor to the difference.

9.5 Therefore, taking Consignia's own data as its current best assessment of avoidable costs (and putting aside some of the potential limitations of the data discussed above) the emerging results suggest that it is difficult to conclude that Consignia's universal service provision represents a significant net cost in the current market environment.

Next steps

9.6 The introduction of competition is likely to alter Consignia's behaviour on its pricing, efficiencies and innovation. Such changes are difficult to predict before the event. The significance of this behavioural change will only be understood following practical experience of competition and observing how it affects the dynamic of the market and Consignia's responses to it. Postcomm, therefore, believes it is prudent to review this analysis over time. This is similar to the approach adopted by OFTEL, which has undertaken periodic reviews of the nature and scale of "loss-making" universal services in telecommunications.

9.7 As discussed above, analysis of the net cost of the universal service does not answer the question of how competition might affect Consignia's commercial position and hence ability to support its operations. Therefore, a relatively low figure for the net avoided cost of the universal service, or indeed a net benefit, cannot be taken in itself as an indicator that full competition would not compromise the provision of a UPS. Issues relevant to considering the question of whether competition might undermine Consignia's ability to sustain its operations are discussed in Postcomm's consultation document on promoting effective competition. One issue that would need to be considered for this latter analysis would be the recovery of "unavoidable" costs which, are not included in the NAC,

but still need to be financed in a competitive environment. Consignia estimates these costs to be about 40% of its total costs.

9.8 Predicting confidently (e.g. in a quantitative way) how significant these issues will be in the case of Consignia's services being exposed to varying degrees of competition within the licensed area is difficult. This is because any such analysis would need to capture the effect of the future behaviour of entrants and more importantly Consignia's, both of which are unknown now but will evolve and change over time. Indeed, one of the benefits of competition is that Consignia will be incentivised to respond in ways that neither it, nor others, had previously considered. Postcomm has consulted on the expected interplay between these various factors in its competition consultation document.

C9.	**Question**
a)	**Postcomm welcomes views on whether there are any other issues that it should consider in undertaking future assessments of the costs of providing the universal service.**

Annex 1 - Definitions of Consignia's data dimensions

Data dimensions

A1.1 Chapter 3 noted that Consignia's cost and revenue data are broken down in several dimensions. These included: product, distance item is sent, size of item and delivery density of address.

Products

A1.2 Table A1.1 lists the products contained in the data set provided by Consignia and used in our analysis in this document.

Table A1.1 – Consignia's products

Product type	Delivery time[17]	Purchase Criteria	Nationwide service at uniform tariff
Stamp 1	Next day	None	Yes
Meter / pre-paid 1	Next day	Need a franking machine[18] – otherwise none. Pre-paid are where customers for example have purchased envelopes with a pre-paid symbol attached. Also unfranked mail handed over at Counters with cash or on account.	Yes
Standard tariff 1	Next day	As PPI (Printed Postage Impressions) is a payment method not a separate product to 1st class – (minimum annual postage value pa is £5k). PPI is account or credit mail which is not paid for at the time of acceptance but is accompanied by a completed postal docket.	Yes
Packetpost 1 Flatsort Packetsort	Next day	>5000 items per year >1000 items per mailing Minimum 1000 items ("flat" packets) per mailing Minimum 1000 packets in a mailing	Yes
Mailsort 1 - other	Next day	Minimum volume 1k packets, 4k letters Minimum level of presortation: from 300 and above of 1400 selections Minimum volume 10k letters, n/a packets Minimum level of presortation: from 300 and above of 700 selections. Barcoded Minimum volume 4k letters, n/a packets	Yes

[17] All delivery times shown are subject to the item being posted before the final collection from the access point and subject to agreed service standards. There are no deliveries on Sundays.

[18] Franking machines are sold by independent franking machine manufacturers (e.g. Pitney Bowes, Neopost, etc.)

Product type	Delivery time[17]	Purchase Criteria	Nationwide service at uniform tariff
		Minimum level of presortation: from 1 and above of 127 selections.	
Mailsort 1 – direct mail	Next day	Minimum volumes as MS1 above	Yes
Stamp 2	Within 3 days	None	Yes
Meter / pre paid 2	Within 3 days	As per meter 1	Yes
Standard tariff 2	Within 3 days	Payment method not a separate product to 2nd class – minimum annual postage value pa is £5k	Yes
Packet Post 2	Within 3 days	>5000k items per year >1000 items per mailing Customer sortation to 12 selections	Yes
Flatsort 2	Within 3 days	As per flatsort 1	Yes
Packetsort 2 Mailsort 2 – other	Within 3 days Within 3 days	As per flatsort 2 Minimum volume 1k packets, 4k letters Minimum level of presortation: from 300 and above of 1400 selections Minimum volume 10k letters, n/a packets Minimum level of presortation: from 300 and above of 700 selections.Barcoded Minimum volume 4k letters, n/a packets Minimum level of presortation: from 1 and above of 127 selections	Yes Yes
Mailsort 2 direct mail	As above	As above	Yes
Maisort and Flatsort 3 – other	Within 7 days	Minimum volume 1k packets, 4k letters Minimum level of presortation: from 300 and above of 1400 selections Minimum volume 10k letters, n/a packets Minimum level of presortation: from 300 and above of 700 selections. Barcoded	Yes
Mailsort and flatsort 3 – direct mail	As above	As above	Yes
Walksort 1- direct mail	Next working day	A variation of Mailsort 1400 for customers who sort and bundle mail by individual postal delivery walk. Mailing must consist of at least 4,000 letters or 1,000 packets.	Yes
Walksort 1 – other	Next working day	As above	Yes
Walksort 2 – direct mail	Within 3 working days	As above	Yes
Walksort 2 -other	Within 3 working days	As above	Yes
Presstream 1	Next day	Only for the publishing industry for periodicals published at least 4 times per year. Minimum 90% must be fully postcoded. Minimum volume:4000 Letters or 1000 Packets	No

Product type	Delivery time[17]	Purchase Criteria	Nationwide service at uniform tariff
		Minimum presortation: A minimum of 300 selections attempted per posting	
Presstream 2	Within 3 days	Only for the publishing industry. For periodicals published at least twice a year.Minimum 90% must be fully postcoded Minimum volume: 4000 Letters or 1000 Packets Minimum pre-sortation: A minimum of 300 selections attempted per posting	No
Response services Includes: - business reply - freepost	Next day	Set up of licence agreement	Yes
Response services 2	Within 3 days	As above	Yes

Source: Consignia

Distance item is sent

A1.3 Table A1.2 describes the definitions used for "Distance".

Table A1.2 – Definitions used for "Distance" in this document

Distance	Definition
Local	Mail that is posted and delivered within the same postcode zone (of which there are 122)
Neigbouring	Mail that travels outside the originating postcode area up to 100 miles away
Distant	Mail that is posted for delivery outside the local postcode zone for delivery over 100 miles away

Source: Consignia

Size or format of item

A1.4 Table A1.3 describes the definitions used for "size or format" of item.

Table A1.3 – Definitions used for "Size" in this document

Size or format	Definition
Mechanised letter	Size C5 (160mm x 240mm) or less and thickness <10mm – sorted mechanically

Manual letter	Size C5 (160mm x 240mm) or less and thickness <10mm – sorted manually
Flat	Size greater than C5 and less than B4 (250mm x 353mm) and thickness <10mm
Packet	All others

Source: Consignia

Delivery density

A1.5 Table A1.4 describes the definitions used for "delivery density" of item. These refer to the number of business and residential delivery points per square mile of each postcode.

Table A1.4– Definitions used for "delivery density" in this document

Density	**Residential - no of delivery points per sq mile**	**Business - no of delivery points per sq mile**
Deep Rural	0-70	0-0.4
Rural	70-600	0.4-5
Suburban	600-2000	5-15
Urban	2000-5000	15-50
City Centre	5000+	50+

Source: Consignia

Annex 2 - Description of LRMC data and their limitations

A2.1 Chapter 3 briefly described the LRMC data provided by Consignia and some of their limitations. This annex sets out Postcomm's understanding of the estimation methodology employed by Consignia and associated limitations in more detail.

Year of data

A2.2 The data are for 1999/00. These LRMC estimates will underpin Consignia's Costing and Contribution system (e.g. in association with the production of the 2000/01 regulated accounts). Consignia is conducting an ongoing review of the LRMC estimates that they have submitted to Postcomm. In general, they regard the priorities for further review as those cost areas that are both significant in size and have a wide uncertainty range. They have not yet provided a timetable for further review. Postcomm understands the impact of any further changes will not be included in runs of the Costing and Contribution system on 2000/01 data.

Description of estimation methodology

A2.3 Postcomm sets out below its understanding of the approach adopted by Consignia to the estimation of route-wise LRMCs according to the two steps Postcomm understand they follow: (a)estimation of activity and product LRMCs, and (b) estimation of route-wise LRMCs.

Estimation of activity and product LRMCs

- Activity LRMCs are estimated either with operational models or by expert judgement or by a combination of the two.

- There are some 25 operational models representing different processes/activities within Consignia's vertical supply chain. These range from the very simple (e.g. various sorting costs are pro rata to volumes) to a much more complex model of the delivery operation.

- The operational models isolate the main elements within each activity and examine the cost drivers of these elements. Mail volumes may be a non-driver, a partial driver or a full driver of some or all of the elements of an activity. The responsiveness of costs to changes in volumes is assessed taking into account two factors: (i) rescaling of the inputs to the activity, and (ii) a degree of reoptimisation of the network. As an example of reoptimisation, Consignia's delivery models allow for variation in the number of delivery routes in response to volume changes, but, for the purposes of the LRMC factors provided, do not allow for any switching of delivery mode (e.g. foot, bicycle) in response to volume changes. Consignia has not provided a quantitative assessment of the materiality of keeping certain aspects of its operations "fixed" in this way. Postcomm does not yet have a clear understanding of the full extent of this type of reoptimisation within the models, or its impact on the marginal cost factors, as Postcomm has not been provided with a detailed description of all of the operational models or the models themselves. Consignia has clarified that all marginal cost estimates are made on the assumption that there is no change to the prevailing service standards.

- The approach above is carried out in respect of both staff and non-staff costs.

  In some cases, LRMC factors for other costs are linked to staff costs, where that is deemed to be the cost driver; in others, they are separately estimated. However, Postcomm does not yet have a detailed understanding of the treatment of non-staff costs, as Postcomm has not been provided with a detailed description of all of the operational models or the models themselves.

- LRMCs for air and rail costs are separately estimated using the actual contract costs.

- The resulting LRMC factors are then matched to around 700 activity costs and the resulting marginal activity costs are then attributed to individual products. Consignia has clarified that non-directly attributable but marginal activity costs are included in the overall 0.6 estimate. However, these costs are not included in the Cost and Contribution Model, so have been overlaid on the activity/product marginal costs obtained directly from that source for 1999/00. Consignia has stated that these costs will be included in the Cost and Contribution Model for 2000/01.

Estimation of route-wise LRMCs

- The process described above results in unit LRMCs by product and by size (since size is included in the Cost and Contribution Model). To generate LRMCs by route requires further estimation across distance and delivery (delivery comprises density and type[19]).

- This is achieved by taking the marginal activity costs relevant to a particular product and size and allocating those marginal activity costs across the components of distance and delivery. Clearly, this is only done for those costs that vary according to the particular cost driver (e.g. transport related costs vary by distance so are re-estimated by component of distance).

- Consignia has stated that the estimates made involve an element of expert assessment. Postcomm has been provided with an example of the cost adjustments for "distance travelled" and the approach appears reasonable.

- In making these estimates, Consignia adopts various uniformity assumptions – i.e. it does not consider correlations between cost drivers.

[19] There are five densities (City Centre, Urban, Suburban, Rural and Deep Rural) and two types (Business/firms and Residential).

Data limitations

Date of preparation

A2.4 The data are for 1999/00 and therefore, although they are the latest available, it is possible that their value might have changed over time.

Marginal versus avoidable?

A2.5 There could be a difference between avoidable costs and marginal costs. This depends on the size of the increment/decrement considered to be marginal. Broadly speaking, an avoidable view of costs would be expected to be greater for any particular service than a marginal view of costs because the increment/decrement considered is averaged over a greater range of volume increases/decreases. No adjustment has been made to Consignia data to reflect this.

The nature of the costs being estimated

A2.6 Postcomm understands that Consignia's LRMCs have been constructed on the following basis:

1. assuming that both staff and non-staff factors of production are in principle variable;
2. allowing for at least a degree of change in existing infrastructure and working patterns in response to volume changes (e.g. changes to Rural deliveries as stated above);
3. assuming that the estimates hold over a range of volume changes of +/- 30%; and
4. not taking a forward looking view of alternative technologies which currently exist and may be used as alternatives in the future or which may become available.

A2.7 However, Consignia has not yet provided a detailed account of the treatment of non-staff costs (point 1) or the full extent to which existing infrastructure and

working patterns have been allowed to vary (point 2.). The actual treatment of these costs and modelling approach employed is critical to the "long-run" interpretation.

A2.8 However, it is also clear that Consignia's LRMCs are not forward looking in the sense of considering new technologies which may be adopted or any expected efficiencies, which is at odds with the way that Consignia has itself developed over the last decade (e.g. the introduction of OCRs) (point 4)[20]. This may limit the interpretation of Consignia's LRMCs in certain contexts and in particular where used in cost projections.

A2.9 Consignia has stated that it is also necessary to overlay the impact of, for example, introduction of new technology and improvements in efficiency. Consignia carries out such overlays within its planning process. Thus, Consignia captures the impact of forward looking costs by applying marginality factors to projected cost levels, which may include an element of adjustment to reflect anticipated technology and efficiency improvements.

A2.10 In summary, Postcomm, advised by Andersen, do not have sufficient information at this stage to determine whether a material revision to Consignia's estimated LRMCs may be appropriate and/or that the existing estimates may still be more appropriately interpreted as SRMCs in some respects. No adjustments have therefore been made in this report. However, Postcomm intends to continue its assessment in this area.

[20] Postcomm understand that Consignia does not consider that there are any existing technologies which it does not currently use, but which it would employ given volume changes of +/- 30%. However, even if this is the case, their projected LRMCs do not factor in any trends of technology innovation that have characterised their business historically and may be considered likely to apply in the future.

Activity and route-wise LRMCs

A2.11 There are a number of limitations with Consignia's calculation of activity and route-wise LRMCs:

- various costs including central overheads (including account management, sales and marketing, etc.) comprising some £900m, are not subject to detailed modelling and expert judgement has been applied;
- an estimated activity cost may have several sub-activities for which the cost drivers are understood but the relative weighting of the different components is not accurately known; and
- the allocation of marginal costs to the dimensions and components of a route do not take account of any correlations with product costs incurred across other dimensions of the same route.

Cost allocations

A2.12 Postcomm have not reviewed Consignia's cost allocations to determine whether these are reasonable.

Lack of historical validation

A2.13 Consignia has not validated its LRMC estimates by reviewing its past performance. While it would be difficult to conduct such an exercise to identify ceteris paribus LRMCs, in principle the results would provide an important cross-check on the LRMCs obtained from operational models or from expert panels.

Lack of documentation

A2.14 The LRMC factors estimated by Consignia are independent of the level of costs. Accordingly, Consignia has only re-visited the estimation of LRMC factors as and when it believes there is some significant change justifying such a review. LRMC factors were first estimated in the 1970s. The LRMC exercise has not been fully documented since 1985-1986.

Annex 3 – Key results table

Dimension	Disaggregation by dimension	Volume and % of total volume (m)	Volume related to "loss-making" services and % breakdown (m)	Revenue and % of total revenue (£m's)	Revenue related to "loss-making" services and % breakdown (£m's)	"Contribution" and % of total "contribution" (£m's)	Loss and % breakdown (£M's)	Utilised routes and % breakdown (£m's)	"Loss-making" routes and % breakdown (£m's)
Total		**18,488**	**982**	**4,724**	**232**	**2,196**	**81**	**20,340**	**3,290**
Distance item is sent (x3)	Local	4,380 (24%)	359 (37%)	1,228 (26%)	85 (37%)	505 (23%)	28 (34%)	6,780 (33%)	1,046 (32%)
	Neighbouring	5,331 (29%)	291 (30%)	1,392 (29%)	70 (30%)	663 (30%)	25 (30%)	6,780 (33%)	1,070 (33%)
	Distant	8,778 (47%)	332 (34%)	2,104 (45%)	77 (33%)	1,028 (47%)	29 (36%)	6,780 (33%)	1,174 (36%)
Type of product/service purchased for item (x22)	Stamp 1 & 2	2,127 (12%) 1,816 (10%)	208 (21%) 149 (15%)	608 (13%) 385 (8%)	56 (24%) 31 (13%)	193 (9%) 105 (5%)	19 (24%) 13 (16%)	1,170 (6%) 1,230 (6%)	284 (9%) 323 (10%)
	Meter/Pre-paid 1 & 2	1,428 (8%) 1,243 (7%)	94 (10%) 81 (8%)	501 (11%) 300 (6%)	26 (11%) 17 (7%)	217 (10%) 110 (5%)	9 (10%) 7 (9%)	1,230 (6%) 1,260 (6%)	271 (8%) 284 (9%)
	Standard Tariff 1 & 2	1,179 (6%) 1,828 (10%)	111 (11%) 170 (17%)	424 (9%) 450 (10%)	30 (13%) 34 (14%)	198 (9%) 186 (8%)	8 (10%) 14 (17%)	1,230 (6%) 1,230 (6%)	268 (8%) 272 (8%)
	Mailsort 1 & 2-direct	176 (1%) 929 (5%)	0 (0%) 13 (1%)	52 (1%) 206 (4%)	0 (0%) 2 (1%)	38 (2%) 124 (6%)	0 (0%) 0 (1%)	1,230 (6%) 1,020 (5%)	13 (0%) 54 (2%)
	Mailsort 1 & 2-ordinary	218 (1%) 1,546 (8%)	1 (0%) 21 (2%)	64 (1%) 342 (7%)	0 (0%) 4 (2%)	47 (2%) 207 (9%)	0 (0%) 1 (1%)	1,230 (6%) 1,020 (5%)	13 (0%) 54 (2%)
	Mailsort & flatsort 3-direct	2,232 (12%)	17 (2%)	402 (9%)	2 (1%)	227 (10%)	1 (1%)	960 (5%)	62 (2%)
	Mailsort & flatsort 3-ordinary	1,738 (9%)	13 (1%)	313 (7%)	2 (1%)	177 (8%)	1 (1%)	960 (5%)	62 (2%)
	Walksort 1 & 2 – direct	14 (0%) 191 (1%)	0 (0%) 2 (0%)	2 (0%) 22 (0%)	0 (%) 0 (0%)	1 (0%) 8 (0%)	0 (0%) 0 (0%)	180 (1%) 180 (1%)	0 (0%) 3 (0%)
	Walksort 1 & 2 – ordinary	18 (0%) 324 (2%)	0 (0%) 3 (0%)	3 (0%) 37 (1%)	0 (%) 0 (0%)	2 (0%) 13 (1%)	0 (0%) 0 (0%)	180 (1%) 180 (1%)	0 (0%) 3 (0%)
	Presstream 1 & 2	171 (1%) 466 (3%)	5 (0%) 0 (0%)	46 (1%) 202 (4%)	1 (0%) 0 (0%)	[REDACTED]	0 (0%) 0 (0%)	840 (4%) 810 (4%)	40 (1%) 8 (0%)
	Flatsort/P'sort/P'post 1 & 2	202 (1%) 153 (1%)	37 (4%) 7 (1%)	141 (3%) 90 (2%)	12 (5%) 2 (1%)	65 (3%) 50 (2%)	4 (5%) 1(1%)	1,260 (6%) 660 (3%)	362 (11%) 316 (10%)
	Response services 1 & 2	300 (2%) 191 (1%)	30 (3%) 20 (2%)	94 (2%) 40 (1%)	8 (4%) 4 (2%)	[REDACTED]	1 (2%) 2 (2%)	1,140 (6%) 1,140 (6%)	241 (7%) 357 (11%)
Size of item (x4)	Mechanised letter	10,472 (57%)	0 (0%)	2,135 (45%)	0 (0%)	915 (42%)	0 (0%)	4,290 (21%)	0 (0%)
	Manual letter	1,307 (7%)	689 (70%)	313 (7%)	156 (67%)	2 (0%)	51 (63%)	4,440 (22%)	1,115 (34%)
	Flat	5,715 (31%)	26 (3%)	1,639 (35%)	5 (2%)	981 (45%)	0 (1%)	6,270 (31%)	286 (9%)
	Packet	994 (5%)	266 (27%)	637 (13%)	71 (30%)	297 (14%)	29 (36%)	5,340 (26%)	1,889 (57%)

Dimension	Disaggregation by dimension	Volume and % of total volume	Volume related to "loss-making" services and % breakdown	Revenue and % of total revenue	Revenue related to "loss-making" services and % breakdown	Contribution and % of total contribution	Loss and % breakdown	Utilised routes and % breakdown	"Loss-making" routes and % breakdown
Type of recipient for product (x2)	Business/firms	5,667 (31%)	287 (29%)	1,448 (31%)	68 (29%)	723 (33%)	22 (27%)	10,170 (50%)	1,535 (47%)
	Residential	12,821 (69%)	694 (71%)	3,276 (69%)	164 (71%)	1,473 (67%)	59 (73%)	10,170 (50%)	1,755 (53%)
Density of delivery area (x5)	City Centre	4,592 (25%)	236 (24%)	1,173 (25%)	55 (24%)	571 (26%)	18 (23%)	4,068 (20%)	603 (18%)
	Urban	6,414 (35%)	332 (34%)	1,639 (35%)	78 (34%)	785 (36%)	27 (33%)	4,068 (20%)	607 (18%)
	Suburban	4,154 (22%)	213 (22%)	1,061 (22%)	50 (22%)	510 (23%)	17 (21%)	4,068 (20%)	610 (19%)
	Rural	2,588 (14%)	150 (15%)	661 (14%)	36 (15%)	259 (12%)	15 (18%)	4,068 (20%)	713 (22%)
	Deep Rural	740 (4%)	51 (5%)	189 (4%)	12 (5%)	70 (3%)	4 (6%)	4,068 (20%)	757 (23%)
Weight of item (x11)	0-20g	7,358 (40%)	367 (37%)	1,561 (33%)	82 (35%)	541 (25%)	30 (36%)	1,980 (10%)	642 (20%)
	21-40g	3,939 (21%)	275 (28%)	733 (16%)	60 (26%)	266 (12%)	24 (30%)	2,130 (10%)	754 (23%)
	41-50g	1,045 (6%)	136 (14%)	192 (4%)	29 (13%)	57 (3%)	11 (14%)	2,040 (10%)	710 (22%)
	51-60g	1,159 (6%)	93 (10%)	203 (4%)	21 (9%)	67 (3%)	9 (11%)	1,920 (9%)	664 (20%)
	61-100g	1,825 (10%)	89 (9%)	421 (9%)	30 (13%)	183 (8%)	6 (8%)	2,220 (11%)	391 (12%)
	101-150g	1,267 (7%)	19 (2%)	396 (8%)	8 (4%)	219 (10%)	1 (1%)	2,010 (10%)	107 (3%)
	151-200g	516 (3%)	2 (0%)	215 (5%)	1 (0%)	125 (6%)	0 (0%)	1,980 (10%)	22 (1%)
	201-250g	451 (2%)	0 (0%)	235 (5%)	0 (0%)	152 (7%)	0 (0%)	1,650 (8%)	0 (0%)
	251-300g	239 (1%)	0 (0%)	152 (3%)	0 (0%)	100 (5%)	0 (0%)	1,530 (8%)	0 (0%)
	301-350g	342 (2%)	0 (0%)	203 (4%)	0 (0%)	149 (7%)	0 (0%)	1,380 (7%)	0 (0%)
	351g +	346 (2%)	0 (0%)	414 (9%)	0 (0%)	337 (15%)	0 (0%)	1,500 (7%)	0 (0%)

Source: Consignia data; Andersen analysis

Note: Parts may not sum to totals due to rounding

Annex 4 – Glossary

Avoidable costs	The costs avoided if an undertaking ceases supplying a particular element of its business (e.g. a particular product or route)
Common costs	Costs incurred when supplying a group of products or routes and which could not be reduced if the undertaking ceased supplying one of these products or routes
"Contribution"	An excess of revenues above avoidable costs
Dimensions	The attributes of routes comprising product-type, distance, size and weight of product, density in the delivery location and type of recipient. Each dimension comprises a number of sub-categories
Directly attributable costs	Costs that vary with the volumes of the particular products to which they are consequently deemed directly attributable
Fixed costs	Costs which do not vary with the level of an undertaking's output
Net avoidable costs (NACs)	The costs less revenues the undertaking would avoid if it were to cease to provide certain products or routes. The "net" refers to revenues and not any wider benefits of universal service provision
Marginal costs	The cost of producing one additional unit of output
Long-run	The period when there are no fixed costs
"Losses"	An excess of avoidable costs above revenues. The term "losses" as used in this document is not intended to correspond to any accounting definition of this term
"Loss-making" routes	Routes which exhibit "losses"
"Gross margin" or "margin"	The difference between revenues and avoidable costs divided by avoidable costs. The term "margin" as used in this document is not intended to correspond to any accounting definition of this term
Normal rate of return	The return required by shareholders and lenders if they are invest in the company
Route	A particular service defined by the combination of six dimensions
Sub-categories	The parameters for a given route. For example, distant comprises local, neighbouring and distant
Universal Postal Service (UPS)	As defined by the Postal Services Act (2000)
Variable costs	Costs that vary with an undertaking's output