INTERCONNECT COMMUNICATIONS

Ofcom

MC / 065: Relay Services Technical Assistance

Alternative Relay Service Suppliers and Estimates of Associate Costs

Final V1.1

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SEPARATE SUPPORTING SPREADSHEET - RELAY COST MODEL FOR OTHER OPERATORS (FINAL).xlsx

1. Background

Currently the BT provided relay service is accessible from all networks. Should BT not continue to offer a relay service to other network operators they will need to find an alternative way of providing such a service to their customers. BT would however continue to deal with the traffic which is originated by its customers. The operators are likely to fall into two categories; those which already operate their own call centres and those which do not. We discuss the implications for each type of operator in this document.

2. Operators which Operate their own Call Centre

Operators which already have their own call centres would be able to make use of these facilities as a starting point and many of the unit costs which we have already estimated for the development of the existing BT service would remain appropriate. Overall there are some key issues which would need to be addressed:

- Proportion of total traffic to be handled by new relay centre
  - These figures are difficult to establish, but some percentages are given below as likely examples.
- Whether the facilities will be fully redundant (as with the current BT system)
  - If the service is to be equal with that provided for hearing people, it is assumed that the service from all operators will need to be fully redundant. This is particularly important if any service is to provide for emergency calls. Whilst this places a small overhead on additional equipment at the nodes, the larger cost will be for Relay Assistants and accommodation. This would imply a secondary call centre or at least the provision of positions elsewhere, or with another operator, to carry calls in the case of an outage.
- The need for 24/7 cover even if traffic volumes are low
  - Because of the need to cover emergency calls it is anticipated that the service will be fully available on a 24 hour basis. If the existing call centre is 24 hours, then the overhead will be marginal. There will necessarily be relatively low additional staff and accommodation costs for the overnight shift if the current call centre is not operating for 24 hours. The main additional cost though would be in the provision of a second node at a second location to provide full redundancy.
- Need for sound proofing of operator positions
  - Standard call centres may not have sufficient noise reduction for the type of call. High noise levels from a call centre have a smaller impact on the short duration enquiry calls that are handled by a “standard” call centre. Relay calls however are generally more of a conversational style and are often considerably longer than an enquiry call. The likelihood is that high background noise levels will impact negatively on the hearing end caller and the RA for such call. In particular, for the hearing customer, the ability to hear parts of other conversations in the background may negate any feelings of confidentiality that is such a key feature of relay services. Additional soundproofing may be necessary to avoid such unnecessary strain on the Relay Assistant and provides a better call experience for the hearing customer.
- Capacity of existing circuits at current call centre
  - The existing call centre will be set up to handle short duration “enquiry” style calls. Calls through a text relay service are likely to entail both short and long calls, and therefore the average call duration can be considerably greater. There may therefore be an impact on the circuit capacity at the existing call centre if it adds-on relay calls.
- Training for new Relay Assistants (RAs)
  - Relay Assistants will need to understand how the service operates and the needs of the text users, as well as some basic deaf awareness. This training will

be an overhead cost on the new relay service and is included as a proportion of the setup costs. This figure is based on the costs that would be incurred by BT for a similar task.

In attempting to estimate the costs of setting up such a service we have drawn on the previous calculations and current KPIs for the BT service, as agreed between BT and Ofcom.

2.1 Proportion of Total Traffic to be Handled by New Relay Centre

The number of RAs required in the busy hour will be dependent on the proportion of the total traffic which will be handled by the call centre. The table below shows these for a range of traffic volumes. This is based on the current levels of traffic as handled by the existing text relay service.

% of total traffic	10%	20%	30%	40%	50%
Number of RAs required	11	19	26	33	40

The size of the call centres required to meet the estimated demand has been calculated based on the number of RAs required. This number has also been used to determine the amount of training required and to calculate staff costs based on the following shift pattern assumptions.

- Each day is made up of 3 eight hour shifts;
- One 8 hour shift uses the maximum number of peak period required RAs;
- The second shift uses ¾ of the maximum number of peak period required RAs;
- The third, overnight shift, uses only 2 RAs to deal primarily with emergency calls, irrespective of the total traffic volume.

We have revised the costing spread sheet which we prepared previously to estimate the initial capital and annual current account costs for these scenarios. The assumptions are noted within the spread sheet.

The cost calculator is driven from the "**Operator Call Scenarios**" sheet where cell "**C3**" is a drop down box to select the appropriate percentage of the total traffic which is to be handled by the new Relay Service provider.

The results are shown on the "**Costs Outputs**" sheet. The assumptions which have been made are shown as Notes in Column "**G**" of that sheet.

We provide below the summary of the capital and annual current account costs for the scenarios identified above.

% of total traffic	10%	20%	30%	40%	50%
Capital Costs	£ 182,200	£ 223,800	£ 260,200	£ 296,600	£ 333,000
Annual Current Costs	£ 883,632	£ 1,199,760	£ 1,504,876	£ 1,775,992	£ 2,047,108

The training of the RAs is included within the Annual Current Costs, even though much of this will be part of the set up activity. This ranges from £43,500 for 10% of the existing traffic to £130,500 for 50% of the existing traffic.

For each entrant offering the relay service there would be a setup cost of around £250k for the two nodes and an additional ongoing annual operating/maintenance cost of £700k. The cost of RAs, their associated accommodation, and equipment, including E1 circuits to serve the nodes, would depend on the amount of traffic that the new entrant believes they will handle. Similarly, the variable ongoing costs for the RA staffing, positions and circuits will depend on the amount of traffic actually carried by each individual relay.

Each of these variables depends in turn on the number of entrants to relay. Without this information it is difficult to establish a total cost of relay services to industry as a whole. These costs however will be in addition to the costs previously calculated for upgrading the current BT system.

2.2 Node Redundancy

These cost estimates are calculated on the basis of a fully redundant service. The figures thus include the costs associated with the provision of a second node at a second site as well as the installation of a data network as currently operated by BT.

Included are also the additional annual current costs for full redundancy of nodes, made up of the node running costs (£347k) and some small additional costs for E1 circuit rental. These costs would be incurred irrespective of the amount of traffic that is handled by the operator.

This should however not impact the number of RAs required or the costs of the RA terminals and positions.

3. Operators which do not Operate their Own Call Centres

The major cost of setting up a relay service is the basic provision of the call centre accommodation and connectivity. Such a facility has a very high capital cost including building and equipment acquisition and also significant operating costs including trunk circuits, staff and overheads. These would mean that it is highly unlikely that an operator without an existing call centre would find it viable to set up such a centre, purely for relay traffic. The economics of such an enterprise would be made worse because such a relay centre would only be dealing with a small proportion of the total relay traffic.

It is probable that operators who do not have their own call centre have contracted that service out to a call centre company. It is likely that operators in this position would extend that contract to cover relay or have another operator handle the traffic for them.

4. Implementation Timescales

Regarding the timescales for implementation of a relay system by an alternative operator, it is considered that this would be similar to that detailed in the previous report on BT's implementation timescales. In that case it was estimated that:

- The node hardware could be provided and commissioned in around 6 months
- A commissioning and testing period of around 3 months would be required before any live traffic could be carried.
- Relay assistant training could be carried out in parallel with this commissioning period.

As a result, it is estimated that the system could be operational in around 9 months from the start of the procurement process. This implementation is separate from BT's plans and would most likely to run in parallel with BT's changes. This would ensure a reliable date for a switch-over to ensure continuity of service for non-BT customers.