

Telephone number portability

A report on a reference under section 13
of the Telecommunications Act 1984



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**Presented to the Director General of Telecommunications
November 1995**

Members of the Monopolies and Mergers Commission as at 17 November 1995

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¹These members, together with Mr D R Fairbairn OBE, Mr S C Finch OBE and Dr G F Owen (selected by the Chairman of the Commission under section 13(9) and (10) of the Telecommunications Act 1984), formed the Group which was responsible for this report under the chairmanship of Mr H H Liesner (who was a Deputy Chairman at the time the reference was made).

Note by the Office of Telecommunications

In accordance with section 14(6) of the Telecommunications Act 1984, the Secretary of State for Trade and Industry has directed the Director General of Telecommunications to exclude from the published report certain matters publication of which appears to the Secretary of State to be against the public interest or the commercial interest of any person. Accordingly certain figures and text have been omitted. The omissions are indicated by a note in the text.

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Part I

Summary and Conclusions

1 Summary

Background and the reference

1.1. On 27 April 1995 the Director General of Telecommunications (DGT) made a reference to the MMC under section 13 of the Telecommunications Act 1984 (the Act) on the subject of telephone number portability (NP). The terms of the reference are at Appendix 1.1. Portability is defined, broadly, as a facility provided by one telephone operator to another which enables customers to retain their telephone numbers when switching their business between those operators.

1.2. The Government and successive DGTs have sought to encourage competition in the supply of telecommunication services as the best method of promoting economic efficiency and the interests of consumers. At March 1995 British Telecommunications plc (BT) still had 95 per cent of all direct fixed connections in the UK although competitors are making inroads in some areas of the market. One reason which at present deters customers from switching operators is the need to change their telephone number when they do so. For this reason a new Condition (34B) dealing with NP was added in 1991 to the licence, granted under the Act, which lays down BT's rights and obligations in running its system. This condition gives the DGT power to direct BT to provide portability of ordinary, 'geographic' telephone numbers in specified areas (given that certain conditions are fulfilled) but allows BT to recover the reasonable costs which it incurs in doing so.

1.3. In August 1994 the DGT directed BT to provide portability to Videotron Corporation Limited (Videotron), a cable company, but no agreement could be reached on financial terms. The DGT then proposed modifications of BT's licence which would require BT to bear most of its own costs and, in the event of disagreements with other operators, allow the DGT to settle the terms. These modifications were unacceptable to BT and the DGT made the present reference to us.

1.4. We are required by our terms of reference to determine whether the matter described below operates or may be expected to operate against the public interest. The matter, broadly, is that:

- (a) BT and Videotron have not been able to agree on the basis on which the costs of providing portability should be allocated between them;
- (b) BT's licence does not provide for the DGT to resolve such a dispute; and
- (c) the dispute is impeding the conclusion of negotiations between BT and other operators

with the result that BT is not providing portability. If we find this matter against the public interest, and if we consider that the adverse effects could be remedied by modifications to BT's licence, we must specify the adverse affects and the modifications needed to remedy them.

Portability

1.5. Three main technical solutions for the provision of portability have been identified:

- (a) *Tromboning*. Calls are routed to the local BT exchange to which the called customer was previously connected. The exchange recognizes the number as having been ported and adds digits so that the call can be rerouted. The call is then passed to the BT trunk exchange and transferred to the other operator by the normal interconnect method. For calls which came in via the trunk exchange in the first place there is thus a doubling back, hence 'tromboning'.
- (b) *Call drop-back*. This is a more efficient version in which the local exchange sends a signal back to the trunk exchange permitting the call to be routed direct to the other operator.
- (c) *Intelligent network*. A database held outside the switches is consulted at some stage during call set-up and supplies the switches with the information necessary to complete the call.

1.6. Tromboning is the only solution available in the immediate future. BT has held trials with cable companies during 1995 and has now invited other operators to apply for the reciprocal implementation of portability on a commercial basis. BT will not be able to introduce call drop-back until late 1997. Intelligent network arrangements, which require heavy capital investment, are seen as the likely preferred method of providing portability in the longer term, alongside other advanced services.

1.7. Tromboning and call drop-back give rise to three main categories of cost:

- (a) the initial costs of modifying the network and systems for the introduction of portability (system set-up);
- (b) the costs of adjusting switches and administrative records to enable a particular customer to port a number to another operator (per line set-up); and
- (c) the additional costs involved in routing a call to a ported number (conveyance).

1.8. BT estimated its system set-up costs for tromboning at £35 million, with a further £2 million for drop-back. Its estimate of per line set-up costs was initially over £36 but following successive reductions BT now puts this cost at £12 with further cuts expected. For the additional conveyance needed for ported calls BT estimated its costs as an average of 1.23p a minute under the tromboning method but again its estimate has now fallen sharply to 0.54p, with a lower rate of 0.2p under call drop-back. BT's total costs in implementing portability over the four years from 1996/97 could be of the order of £220 million.

Views expressed

1.9. The DGT said that the lack of NP was a major constraint on the development of competition. Portability would bring benefits not only to customers who ported their numbers but also to UK telecommunication users generally—from efficiency improvements resulting from the strengthening of competition—and to those making calls to ported numbers. BT, however, had an interest in delaying the introduction of portability and, failing that, in requiring its competitors to pay high charges. Condition 34B did not enable the DGT to resolve disputes between BT and other operators and should therefore be amended, though he should not be bound to a rigid framework which would prevent him from responding to rapidly changing technology and market developments.

1.10. Cable companies and other operators generally supported these views, while representatives of users emphasized that the costs and inconvenience of changing numbers could be considerable. Cable companies said that they would not be able to proceed with universal portability for residential customers under BT's proposed charges.

1.11. BT emphasized that it was committed to the introduction of NP and had done all it reasonably could to facilitate that. It faced fast-growing competition from the cable companies, whose market shares in areas where they already offered telephony were growing rapidly; NP would undoubtedly stimulate a further increase. While BT was ready to bear its own system set-up costs, there was no justification for its being unable to recover its per line set-up and additional conveyance costs, and no need for a licence amendment. The main beneficiaries of portability were those who ported their numbers and they should pay BT's reasonable costs of providing for this. The absence of any charges would lead to excessive porting and a waste of resources, primarily those of BT. BT was particularly concerned that the DGT should not be given further discretion in this area, arguing that he already had the power to determine BT's reasonable costs and that additional powers were unnecessary and undesirable.

The public interest

1.12. BT has consistently quoted to other operators high estimates of the costs they would be likely to incur if they wanted NP. The main effect of portability in the short term will be to accelerate BT's loss of customers, and as long as BT's licence remains as it is, BT has no incentive to reach agreement with other operators. BT retains a strong position in the market and there are considerable obstacles to the growth of competition. The introduction of portability is necessary to promote effective competition between operators, which will benefit customers and promote efficiency.

1.13. We have carefully analysed the issue of who should bear the costs of implementing portability in the light of a number of detailed economic submissions. We consider that it is not appropriate for BT to be able to recover from other operators all the costs which it is claiming under the terms of its current licence. We believe portability needs to be introduced more rapidly and effectively than is likely if BT's licence remains unchanged: there would be further protracted argument about the level of costs, and any take-up by other operators would be on a restricted basis, preventing the full realization of the benefits which the widespread introduction of NP would bring.

1.14. We therefore concluded that 'the matter' specified in the reference is against the public interest and that the adverse effects which we identified could be remedied by modifications of the conditions of BT's licence.

Modifications

1.15. As regards *system set-up costs*, we take the view that these are an essential part of the investment which any operator needs to make in providing telecommunication services. BT should therefore bear its own system set-up costs. We recommend, however, that BT should be able to pass on its *per line set-up* costs to the operators to which its customers port their numbers. For additional *conveyance* we propose that under the call drop-back solution BT should bear these costs. During the period of tromboning, however (ie to end October 1997), we recommend that the estimated additional cost compared with call drop-back should be shared equally between BT and other operators. The DGT should be able to determine that charges are based on the implementation of cost-saving techniques when he judges it reasonable for BT to introduce them, regardless of whether BT has in fact done so.

1.16. We understand BT's concern that it would be inappropriate for the DGT to have a very wide discretion as to how portability costs should be allocated. We therefore consider that the principal elements of the charging regime which we have outlined above should be incorporated in a revised licence condition, with the DGT having the power to resolve deadlocks over matters of detailed interpretation.

1.17. Our recommendations would lead to a distribution of the total of per line set-up and additional conveyance costs between BT and other operators of roughly two-thirds and one-third respectively over the period 1996/97 to 1999/2000. The amount borne by other operators is higher in the first two years and declines sharply thereafter with the transition to call drop-back and the reduction in per line set-up costs.

1.18. Our analysis has been carried out in the context of the portability of single geographic numbers. As far as number blocks are concerned, it appears from BT's evidence that similar issues generally arise and we consider that our recommendations should apply to the porting of number blocks. As regards non-geographic numbers, the stage reached in the industry discussions of this form of portability was not such as to enable us to address it in any detail. The modifications which we specify will help the parties in reaching agreement on any further modifications of the licence condition which may prove necessary to cater for other forms of portability.