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CABINET

MINISTERIAL COMMITTEE ON ECONOMIC STRATEGY

INVESTMENT AND FINANCING REVIEW: TELECOMMUNICATIONS

Memorandum by the Secretary of State for Industry

1 Post Office Telecommunications have submitted additional bids for 1981/82, 1982/83 and 1983/84, totalling nearly £500 million at 1980 Survey prices. This memorandum considers whether the investment proposals underlying these bids should be approved and if so how they should be financed and what implications that may have for the business's financial target.

BACKGROUND

2 The last White Paper (Cmnd 7841) provided for increases in the telecommunications investment programme totalling (at 1980 Survey prices) some £175 million in aggregate in 1980/81, 1981/82 and 1982/83 compared with the preceding year's White Paper (Cmnd 7439). These increases took into account in particular the acceleration of the installation programme for the semi-electronic TXE4(and later TXE4A) exchanges designed to bring about improvements in the quality of service and lower manning levels and maintenance requirements; this involved a decision to phase out Strowger by 1992 instead of 1995 as previously intended.

3 The present additional bids arise partly from additional capital requirements

1981/82	1982/83	1983/84
+ 74	+ 50	+ 170

and partly from a reduction in internal resources (due largely to a reassessment of depreciation)

1981/82	1982/83	1983/84
- 23	- 65	- 110

leading to total bids for extra finance of

+ 97	+ 115	+ 280

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4 The additional capital requirements arise across the field and reflect higher forecast levels of expenditure on System X, on new products and services (such as Radiopaging and Teletex), on the expansion and modernisation of existing products and services, and on a variety of other items such as accommodation, extra computer capacity and special efforts to reduce the waiting list.

5 The Department of Industry and the Treasury have fairly detailed information about the composition of Telecommunications' large investment programme (over £1½ billion a year) but we are not given the economic justification of each element in the kind of detail provided by some other industries like steel. However, the Post Office itself has developed very sophisticated methods of investment appraisal and projects are evaluated against a test discount rate of 8%, designed to ensure that new investment as a whole attains the Government's required rate of return of 5% in real terms.

6 In justifying the programme, the Chairman explains that a first class telecommunications service is crucial to national prosperity. Technological advances continue to accelerate and possible new services are multiplying fast. An energetic strategy by the Post Office in the development of new services is therefore essential to maintaining the UK's position.

7 Rapid expansion of the network continues to be essential to generate the cash flow necessary to facilitate the transmission of the volume and diversity of voice, image and data information. The Post Office plan is 87 telephones per 100 residential households by March 1985. The new lines produce a rapid return even where growth is concentrated, and it now has to be, mainly on the lower socio-economic groups. The Post Office aim to reduce the waiting list for new connections from its unacceptably high current level of 250,000 to 40,000 by 1983/4 and markedly to improve service. Automatic call failures in Britain, although roughly the same as in EEC countries, are currently worse than in the USA by a factor of 2, (nearly 4 in London) and worse still compared with Canada and Sweden. This is serious in itself. But even this inadequate performance is only achieved by consuming an undue amount of manpower keeping old exchanges going.

8 Against this background the Post Office has been extremely reluctant to contemplate any exercise to illustrate cuts designed produce a reduction in the external financing requirement in each of the years 1981/82 to 1983/4 equivalent to 10% of telecommunications investment - i.e £150m. The Post Office have, however, indicated how a blanket 10% cut could impact on planned programmes.

9 For example, the bulk of Post Office investment is devoted to the modernisation of the network and the ordering of new exchange equipment. Substantial increases in System X expenditure are planned. These plans have been extensively discussed and carefully co-ordinated with the industry. They are the essential basis of the prospects for a modern network in this country and for a major revival of telecommunications exports based on System X. The estimated effect of the cut is:

PO Ordering of Electronic Exchange Equipment

£m 1980 Survey Prices

	80/81	81/82	82/83	83/84
As Planned	250	265	300	375
After Cut	140	205	250	325

PO Exchange Equipment Cash Flow to UK Telecoms Industry

£m 1980 Survey Prices

	81/82	82/83	83/84	84/85
As Planned	465	366	407	446
After Cut	411	302	343	371

10 The cut would delay the development of a modern telecommunications network capability in this country significantly, and the manufacturing industry would incur serious loss of employment. It is estimated that the direct and indirect lost job opportunities in the manufacturing industry due to such a cut would be:-

81/82	82/83	83/84	84/85
6150	7400	7600	8750

11 The Post Office plans to improve service and productivity in the immediate future rest largely on the rapid replacement of Strowger exchanges with the British TXE4 and 4A systems. They are available now in quantity and TXE4 is already giving very good technical results in service. The plans are to replace Strowger by TXE4 or 4A in a total of 450 exchanges serving over 5 million customers by March 1985. The cut would reduce this to 350 exchanges serving less than 4 million customers. Many of the oldest and most defective exchanges serve business communities in the centres of cities and the cut would unavoidably bear most on them. For example 25 exchanges in London would be affected, just where service is worst.

12 The quality of service implications of any change in the Strowger replacement programme are quite unambigious as the following results of computer sampling of calls in Birmingham in March 1980 showed

	% calls failing due to defects	% calls with bad transmission
Strowger exchanges	1.53	1.06
TXE4 exchange	0.42	0.00

Similarly, total exchange fault reports show a rate of 0.7 and 0.15 for electronic exchanges.

13 Another effect of a 10% blanket cut would be a decrease in the planned size of the telephone system of half a million by March 1985, and a high waiting list throughout the period.

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14 Post Office plans provide for an expenditure over the period of £250m on international communication. This would have to be cut by at least £30m and would have an adverse effect on export communications and on the special position which London enjoys as an attractive location for the European headquarters of multi-national companies.

15 There are possibilities for modyfing telecommunications investment requirements distinct from a blanket 10% cut. Overall the Post Office are setting themselves the target of having something like 80% or 90% of the market for new services and attachments to the network which is to be exposed to competition. Obviously, investment in this area could be cut by an arbitrary amount - 20% off their market share target would save something like £50m in 1983/84. However, a saving in such investment would not necessarily result in a saving in Post Office external financing requirements, because the reduction in market share would result in a reduction in revenue and in potential profits over time. In any case, the investment saving would be much less in the earlier years.

16 Another possibility in the same area of new products and services is to privatise some of the "downstream" activities such as Prestel or Radiopaging, or even the supply of customer apparatus. The Department of Industry is exploring such possibilities with the Post Office. But again it is far from certain that the net effect overall would necessarily be to reduce the Post Office borrowing requirement. Private sector interest is likely to centre on the most profitable activities, and again the point applies that the overall effect might well be to reduce Post Office profit (and therefore funds available for re-investment) overall. There is certainly no prospect of any worthwhile help from this quarter until 1983/84 at the earliest.

17 The Post Office has a pivotal role to play in the development and promotion of the nation's information technology hardware and software. The total investment programme of the Post Office is smaller than that of equivalent telecommunications authorities in similar countries abroad and is lower in real terms than the average Post Office telecommunications investment in the first half of the 1970s. Officials in the Department have concluded from their review of the possibilities that the Post Office's fixed asset investment plans:

1981/2	1982/3	1983/4
1545	1500	1578

should be approved in respect of the first 2 years, subject to the usual limit on commitment of 85% in the second year. However, we believe there is a case for reducing the figure for 1983/4 by £100m to take account of the possibility that the Post Office's high market share assumption in the non-monopoly area may be unjustified and to enable the scope for privatisation of downstream activities to be more exhaustively examined.

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FINANCIAL TARGET

18 It remains to consider whether these increased investment bids should be financed by additional borrowing or from internal resources. The Post Office's bids assume a financial target (i.e a real return on assets) of 6½% in each of the three years, but the Post Office consider 6½% to be higher than can be justified either on normal commercial criteria or by the Government's required rate of return (RRR) on new investment (5%).

19 The last Government reduced the financial target from 6% to 5% in April 1979. Since then the asset base has been revalued to take account of revised estimates of the rate of technological innovation and other factors. This has reduced the cash flow resulting from the 5% financial target by between £150m and £200m a year, equivalent to about a 1% reduction in the financial target. To obtain the same cash flow the equivalent financial target would need to be about 6%. This would still be as consistent with the RRR today, as the 5% target was in April 1979, since the RRR approach is independent of the particular accounting treatment adopted. However there are indications that a figure derived directly from the RRR might be slightly lower.

20 To grant the Post Office request for a 5½% target would increase their bids for extra finance in the three years in question by further amounts of

160	180	200

The Post Office recognise that increases of this size could not be accommodated in the Government's PSBR programme at this time and therefore accept reluctantly that a 6½% target will be necessary for the time being. They would wish it to be understood, however, that the target should revert to a level more clearly consistent with the RRR as soon as the overall financial constraints permit.

21 The external financing limit for 1980/81 assumed a 6.2% return this year and Cmnd 7841 stated that, while the precise targets for each year had yet to be decided following the downward revaluation of the asset base, the figures in the White Paper assumed that the business would make a real return of about 6% in 1980/81 and 6.5% from 1981/2 onwards. The decision to set the target for 1981/2 and 1982/3 at 6½% is likely to be pre-empted by the corrective action needed to maintain the Post Office's External Financing Limit for 1980/81.

22 Last October the Secretary of State for Trade argued that the target should not be increased above 6% as this would represent blatant exploitation of the Post Office's monopoly and a departure from the fundamental principle that prices should be related to long run marginal cost. It is true that a target derived from long run marginal cost pricing (which would thus be directly consistent with the RRR) would almost certainly be below even 6%. However, the price-elasticity of demand for telecommunications services has up to date been sufficiently low for relative over-charging not to cause a serious misallocation of resources, provided the Post Office pursue their proposals for correcting the relationship between different charges (rental and call; trunk versus local).

23 On balance therefore I conclude that given the financial constraint an increase in the target to 6½% is preferable to a cut in the investment programme for 1981/82 and 1982/3. But I agree

/with ...

with the Post Office that it should be clearly understood that the Government's aim would be to reduce the target as soon as financial constraints permitted. I also recommend that as before, it should be made clear that the target would need to be reviewed should any further revaluation of the asset base or other accounting change lead to a significant alteration in cash flow.

24 The tariff increase raising telecommunications' return to 6½% would be required in the course of the present financial year, though the precise timing remains to be determined in the light of progress in meeting the 1980/81 external financing limit. Present indications are that it would involve an increase of some 17-20%.

CONCLUSIONS

25 I recommend that

i the Post Office's investment programme should be approved in its entirety for 1981/2 and 1982/3 but cut back by around £100m in 1983/4 to allow more time to examine the possibility of privatisation of downstream activities and reducing British Telecommunications' share of the market in the areas to be liberalised for competition,

ii the telecommunications financial target should be set at 6½% for 1981/2 and 1982/3 subject to the qualifications in paragraph 23 above.

K J

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