

Alternatives to pence per minute charging for interconnection services

We believe that it is likely that the "bottom-up" calculation of LRIC will establish that most, if not all, cost drivers in interconnection are not per-minute of usage based. The public policy imperative is that these costs, *whatever their structure*, are used as the interconnection tariff. They should not disadvantage any economically efficient competitor.

If an operator wishes to purchase a service on another basis - such as pence per minute - which does not reflect the LRIC of interconnection then that is a commercial matter for negotiation by that operator. The only interconnection tariff which should be made available is that which accurately reflects the cost drivers of the service. Where there is sufficient competition, and an equitable interconnection regime, BT's retail pricing structure, subject to competition and fair trading constraints, should be a matter for BT.

Conclusion

U S WEST welcomes the opportunity to comment on what we believe is the most significant regulatory review paper published by OFTEL. To summarise our comments, we believe that OFTEL should distinguish between two types of telecommunications service; interconnection and retail.

"Interconnection" should be tightly defined as those service components essential to call completion. The tariff for interconnection should be calculated through a "bottom up" approach which identifies the cost drivers and their long run incremental cost (LRIC), including the appropriate contribution to the cost of capital. There should be no arbitrary mark-up to this LRIC, as any attempt to add common or overhead costs will distort the market, serve as a barrier to effective competition and operate against the public good of "any to any" calling.

"Retail" covers all the other services which operators provide in the marketplace. Operators should recover all of their overhead costs from these retail services. Competition will force operators to allocate these costs to services in the most efficient manner.

In general, operators should have the freedom to tailor their prices to the market, subject to competition and fair trading rules. However there may be a short-term need, as competition develops, for regulatory action to prevent dominant operators exploiting their market power in parts of the market which are nominally competitive but which are, in practice, dominated by one or two operators.

Appendix

Detailed comment on the proposed mark-ups to LRIC

The Efficient Component Pricing Rule (ECPR)

The ECPR depends on a number of assumptions about the market-place which, in the case of telecommunications, are clearly not valid:

- perfectly substitutable, homogeneous products;
- competition only through price;
- a single technology used by all service providers;
- efficiently costed operations by the incumbent;
- incumbent prices equal to social marginal costs, based on the best available technology.

If these assumptions *were* to hold, then there would be no basis for competitive entry since society's resources would be already used to maximum efficiency and social welfare could not be improved by competition.

We agree with the criticisms of ECPR made by OFTEL in paragraphs 4.23-4.25. It is effectively a tool to protect incumbent monopolists.

Ramsey pricing and the inverse elasticity rule

When unable, because of natural monopoly, to adopt the best pricing rule of marginal costs, the "second best" approach is to seek to use that set of prices which will cause the least economic distortion, measured in terms of how those prices will change the pattern of consumption.

The solution to this "second best" approach proposed by Ramsey is known as the "inverse elasticity rule". This approach segments customers into groups according to their elasticity of demand, that is to say from those who are most price sensitive - any increase in price will stop them using the product all together - whose demand is perfectly elastic, through to those who are the most price insensitive - a price increase will have no impact on the amount that they consume - whose demand is perfectly inelastic. The more inelastic the demand, the higher the price charged.

This approach ensures that total consumption remains as close as possible to the level that it would have had the price equalled marginal cost for all customers, with this being sufficient for the firm to break-even.

However there are two policy problems to this approach:

- by setting the highest prices for the most inelastic customers, the heaviest burden is being placed on those who depend upon the product most. This may have undesirable social policy consequences;

- more importantly, it is impossible to segment classes of customer in a partly competitive market. Demand naturally becomes more elastic when there are competing alternatives. The Ramsey rule would suggest shifting prices from areas which are competitive to areas which are still monopoly provided - an anti-competitive move which allows the operator to cross-subsidise competitive markets from un-competitive markets. Customers object, as do other operators who, typically, have no monopoly of their own to exploit.

Furthermore, in a partly competitive market, the incumbent no longer faces the market demand curve with its set of elasticities. It must instead take elasticities from its own demand curve which will differ from that of the market as a whole, thus creating a different set of cross-subsidised prices from the social-optimal set derived by Ramsey pricing in a monopoly.

In short, Ramsey pricing rules, while perhaps appropriate in a pure monopoly environment, are wholly inappropriate in a market moving towards full competition.

Equal Mark-ups

This approach to increasing LRIC is purely arbitrary. It has the benefit of administrative ease but, because of the random impact it will have on pricing signals, probably maximises the distortions, in terms of self-provision vs purchase decisions, over interconnection.

Market-based Mark-ups

In the United States, many states which practice rate-of-return regulation give the incumbent telephone company the right to recover the "revenue requirement" which is the product of the rate-of-return calculation.³ Many states have also historically used the revenues earned from interconnection rates to contribute to the regulated revenue requirement so that less revenue needed to be recovered from residential rates.

Although the UK has explicitly rejected the notion of rate-of-return regulation, because it has poor efficiency incentives and encourages operators to "gold-plate" their investment programme, for the sake of completeness this section describes how U S WEST has approached this regime.

In the US, U S WEST has proposed that the principle of "essential facilities" should govern interconnection tariffs. Those elements defined by US anti-trust law as essential facilities for interconnection are charged on the basis of LRIC; other interconnection elements, which are available from other service providers or which can be reasonably self-provided, are charged at the market price. U S WEST in the United States has recognised that setting prices based on fully distributed costing methods creates pricing signals that distort both entry decisions and consumption decisions. While the elimination of these practices cannot occur overnight, their presence is antithetical to the development of a competitive telecommunications marketplace.

³ Bell operating companies have been prohibited from providing many retail services such as interlata toll, cellular, video programming and have thereby been focused on providing wholesale capabilities to other providers.

APPENDIX E

**A 25% ADDRESSABILITY STANDARD
DOES NOT SIGNIFICANTLY LIMIT A
LEC'S ABILITY TO INCREASE PRICES**

Assume 25% Addressability/0% Competitive Share

	<u>Competitive Area</u>	<u>Non-Competitive Area</u>
LEC Share	25%	75%
Competitor Share	0%	0%

**Case 1: LEC Introduces 10% Price Increase with
10% Share Loss in Competitive Area**

LEC Share	22.5%	75%
Competitor Share	2.5%	0%

Economic Impact

<u>Increased Revenues</u>		<u>Decreased Revenues</u>
2.25%	Competitive Area	2.50%
<u>7.50%</u>	Non-Competitive Area	<u>0.00%</u>
9.75%		2.50%

Net Economic Gain - 7.25%

**Case 2: LEC Introduces 10% Price Increase with
30% Share Loss in Competitive Area**

LEC Share	17.50%	75%
Competitor Share	7.50%	0%

Economic Impact

<u>Increased Revenues</u>		<u>Decreased Revenues</u>
1.75%	Competitive Area	7.50%
<u>7.50%</u>	Non-Competitive Area	<u>0.00%</u>
9.25%		7.50%

Net Economic Gain - 1.75%

APPENDIX F

**IMPACT OF 1% UPPER SERVICE BAND
LIMIT ON LEC PRICING FLEXIBILITY**

**APPENDIX F
PAGE 1 OF 2**

	+5% -10% SBI Limits	+1% -100% SBI Limits	+2% -10% SBI Limits Tandem- Switched	+0% -100% SBI Limits RIC
	(A)	(B)	(C)	(D)
Year 1				
PCI(t-1)	100.00	100.00	100.00	100.00
PCI Change	-2.00%	-2.00%	-2.00%	-2.00%
PCI(t)	98.00	98.00	98.00	98.00

Service Band 1

Existing Revenue	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
SBI(t-1)	100.00	100.00	100.00	100.00
Price Change	-10.00%	-12.00%	-12.00%	-12.00%
Proposed Revenue	\$900,000	\$880,000	\$880,000	\$880,000
SBI(t)	90.00	88.00	88.00	88.00
Upper limit	102.90	98.98	99.96	98.00
Lower limit	88.20	N/A	88.20	N/A

Year 2

PCI(t-1)	98.00	98.00	98.00	98.00
PCI Change	-3.00%	-3.00%	-3.00%	-3.00%
PCI(t)	95.06	95.06	95.06	95.06

Service Band 1

Existing Revenue	\$900,000	\$880,000	\$880,000	\$880,000
SBI(t-1)	90.00	88.00	88.00	88.00
Price Change	0.00%	0.00%	0.00%	0.00%
Proposed Revenue	\$900,000	\$880,000	\$880,000	\$880,000
SBI(t)	90.00	88.00	88.00	88.00
Upper limit	91.67	86.21	87.07	85.36
Lower limit	78.57	N/A	76.82	N/A
Mandatory Reduction	0.00%	-2.03%	-1.06%	-3.00%

**IMPACT OF 1% UPPER SERVICE BAND
LIMIT ON LEC PRICING FLEXIBILITY**

	+5% -10% SBI Limits	+1% -100% SBI Limits	+2% -10% SBI Limits Tandem- Switched	+0% -100% SBI Limits RIC
	(A)	(B)	(C)	(D)
Year 1				
PCI(t-1)	100.00	100.00	100.00	100.00
PCI Change	-2.00%	-2.00%	-2.00%	-2.00%
PCI(t)	98.00	98.00	98.00	98.00

Service Band 1

Existing Revenue	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
SBI(t-1)	100.00	100.00	100.00	100.00
Price Change	-10.00%	-12.00%	-12.00%	-12.00%
Proposed Revenue	\$900,000	\$880,000	\$880,000	\$880,000
SBI(t)	90.00	88.00	88.00	88.00
Upper limit	102.90	98.98	99.96	98.00
Lower limit	88.20	N/A	88.20	N/A

Year 2

PCI(t-1)	98.00	98.00	98.00	98.00
PCI Change	-6.00%	-6.00%	-6.00%	-6.00%
PCI(t)	92.12	92.12	92.12	92.12

Service Band 1

Existing Revenue	\$900,000	\$880,000	\$880,000	\$880,000
SBI(t-1)	90.00	88.00	88.00	88.00
Price Change	0.00%	0.00%	0.00%	0.00%
Proposed Revenue	\$900,000	\$880,000	\$880,000	\$880,000
SBI(t)	90.00	88.00	88.00	88.00
Upper limit	88.83	83.55	84.37	82.72
Lower limit	76.14	N/A	74.45	N/A
Mandatory Reduction	-1.30%	-5.06%	-4.12%	-6.00%

CERTIFICATE OF SERVICE

I, Diane Danyo, do hereby certify that on this 6th day of February, 1996, a copy of the foregoing "Reply Comments of AT&T Corp." was mailed by U.S. first class mail, postage prepaid, to the parties on the attached Service List.


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