

Assessment of the Leased Line Market in the European Union

and the Consequences on Adaptation of the ONP Leased Line Directive

A study prepared for the European Commission

Final



The opinions expressed in this Study are those of the authors and do not necessarily reflect the views of the European Commission.

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1 Executive Summary

1.1 Introduction

The provision and pricing of Leased Circuit offerings has become an issue of prime importance to the Commission as the availability of dedicated capacity becomes a key enabler in all market segments. This report provides a view on the adequacy of supply and pricing of both national and cross border leased circuits. In addition, where problems are identified, the report presents potential regulatory solutions.

1.2 Market Structure – Supply and Pricing

At present, the European market can be characterised as a three tier market consisting of: competitive national markets in some countries; the European corridor market and the peripheral European market (which does not form part of the corridor market and has little national competition).

National markets are competitive in some countries including the UK, Sweden and the Netherlands. However, even in these countries investment in alternative networks by new national competitors has been concentrated in certain areas, for example competitive networks in the UK tend to have limited coverage in Scotland, Wales and Northern Ireland. As a result, large areas of these countries have not seen any increase in supply or competitive pricing. In turn, pricing and supply are still major barriers to users in many areas.

The corridor market has developed between the major business areas of the UK, Belgium, Netherlands, Sweden, Northern France and the Rhinestat in Germany. The incumbent EU players, new national and Pan European entrants have made heavy investments in new fibre systems between these business centres and these routes supply high bandwidth capacity on demand at relatively competitive prices. Nevertheless, it is notable that the US market provides equivalent capacity over longer distances at much lower prices. Hence, we believe that there is scope for further price reductions for both major corporate users and smaller users and expect to see significant price reductions over the next five years. However, in general the national markets in these

countries have not enjoyed an equivalent upsurge in supply and the higher prices and lack of high bandwidth on demand evidence this.

The peripheral market includes countries such as Greece, Portugal, Southern Spain, Italy which are geographically distant from the major EU business centres and have been slower to open up their markets to competition than their core counterparts. As a result there has been very limited expansion in the speed and capacity of leased lines and very little price competition. Over the next five years the business centres of the peripheral markets will see expansion of their service offerings as the European rings are expanded to include them. However, it is the authors' belief that the second tier business areas and rural areas of these markets will not see any significant expansion of leased line offerings until towards the end of the next decade, unless other technologies are deployed.

The table below clearly illustrates the extent to which Pan European networks are focussed on the business corridor.

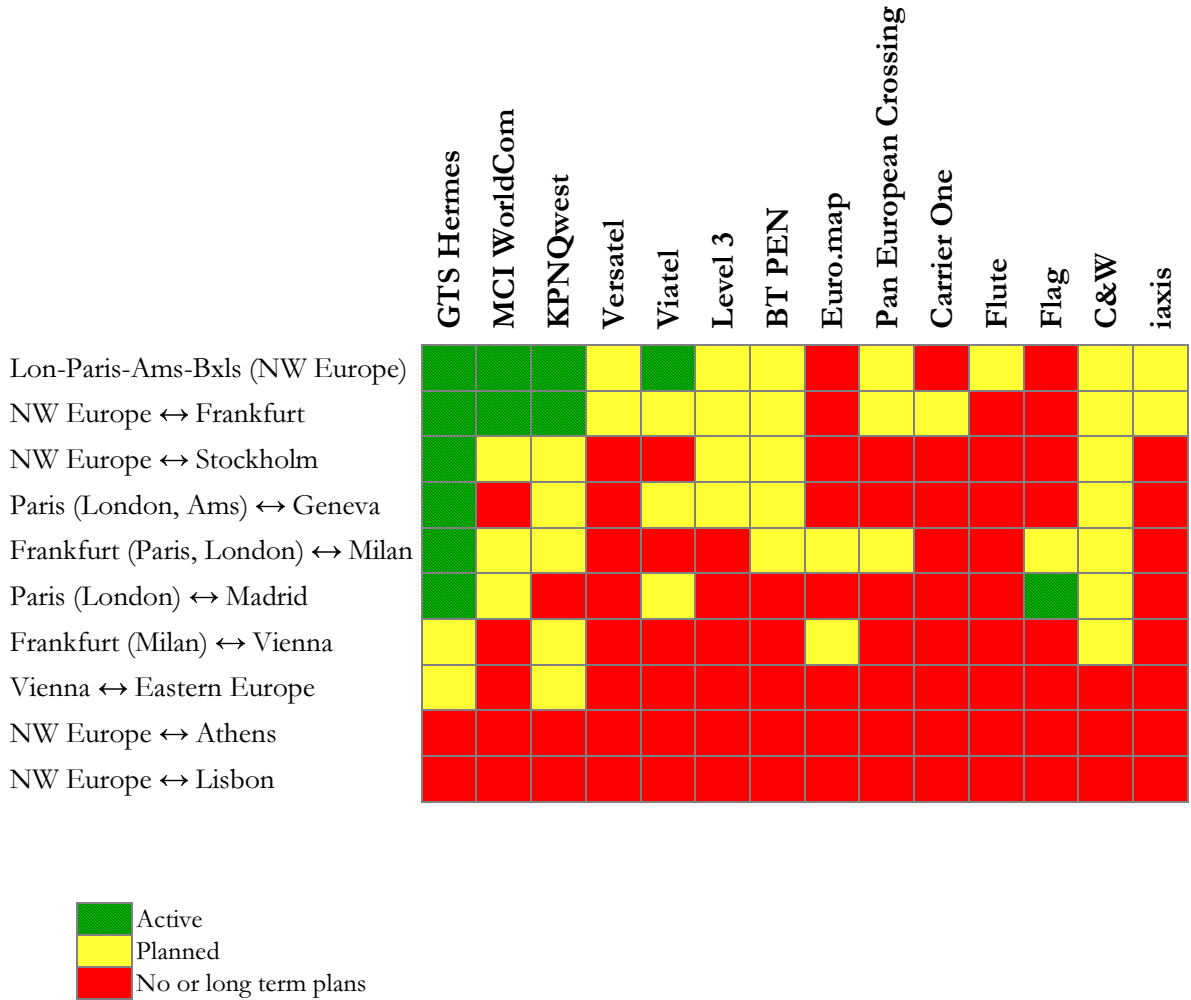


Figure 1: Facilities-based competition in Europe

1.3 Alternative Technologies

Alternative technologies may play an important role in generating competitive benefits. These technologies may be able to provide leased lines, and hence offer additional direct competition to incumbent operators. Alternatively, these technologies can provide products that are effectively leased line substitutes and can therefore provide additional indirect competition to incumbent operators.

One of the most promising sources of competition comes from xDSL (Digital Subscriber Line) technologies. Essentially, these technologies offer ways of providing high capacity down the access network. It can be noted that these technologies (in the form of HDSL) are already used to provide leased lines in the Netherlands and the USA.

xDSL technologies can potentially play a very significant role in networks in the next few years. However, there are a number of issues which have yet to be fully resolved of which perhaps the most important is making their benefits available to market entrants. One alternative is to allow OLOs (Other Licensed Operators) to rent the copper in the access network and add on their own equipment. Another alternative, which is favoured by most incumbents, is for the incumbent to add on their own equipment (xDSL technology for example) to copper wires in the access network, and then to sell the resulting capacity at wholesale rates to OLOs.

The former approach has the benefit of allowing market entrants to install those new technologies in the places they wish, at the pace they wish. On the other hand, this approach could result in problems of interference and raises some interesting pricing issues. The latter approach allows the incumbent to determine the pace of xDSL rollout and therefore may have some drawbacks in terms of creating competition.

Even if regulatory problems are overcome, it is unclear at this stage whether xDSL rollout will occur throughout national access networks or will be concentrated in urban areas only.

Cable TV offers another mechanism for providing additional competition. Operators can either install VDSL technology, which has high bandwidth but as yet has no universally agreed standard, or cable modems, which offer lower bandwidth and with which because bandwidth is shared between users, performance declines as user numbers increase. The degree of competition created will vary between countries depending, for example, on likely penetration levels of cable TV and on whether networks are 2 way enabled (necessary for these applications).

While xDSL and Cable TV are potentially powerful ways of adding competition in the leased line market, the potential role of other technologies seems to be less promising at present. For example, broadband Wireless Local Loop (WLL) technologies using point to multipoint microwave radio links to

provide access to customers instead of fixed wires, are currently at an early stage of development. The technical quality of these systems may not be high enough, at present, to provide the necessary quality of service for business customers.

Future mobile technologies, particularly Universal Mobile Telecommunications (UMTS), will offer much higher bandwidth than present mobile technologies. On the other hand there is considerable uncertainty about the precise level of capacity which will be available and whether, for example, it will be sufficient to offer the equivalent of high capacity leased lines in the near future.

Finally, satellite technologies could provide a good solution for customers in rural areas, although a clear issue will be the prices of terminals and monthly usage charges. In addition, the degree of competition in the broadband satellite market is likely to be limited until around 2005.

1.4 Pricing Trends and Structures

Comparisons with other competitive markets suggest that both cross border and national rates will be subject to large reductions over the next five years. It can be noted, for example, that the US national market offers equivalent services for significantly lower charges than its European counterparts.

The pricing structure of leased lines has moved away from headline rates to headline rates plus discounts with national operators offering a variety of discount structures. There is very little independent factual data available on the level and structure of both incumbent and second operator discounts. However, our market research suggests that across all countries the following are the most common forms of discount structures:

- discounts based on different service options – 51%¹
- bulk usage percentage discounts – 47%
- straight line percentage discounts – 36%

Only 17% of respondents had no knowledge of or had not been offered any type of discount.

¹ All figures shown to the nearest percentage.

These results lead one to conclude that the current discount structures strongly favour large corporate users who use different service options and have high volumes of leased circuits.

1.5 Recommendations for development of the Leased Line Directive

Clearly, we have not yet reached the situation in the EU where we have competitive provision of leased line services in all local and national markets and on all international routes.

Different markets and different international routes are at different stages of their development towards full competition. The authors believe that it is necessary to maintain the Leased Line Directive until the effects of competitive service provision are evident in a far greater number of national markets, both local and regional, and national and international markets than is currently the case.

However, we do not feel that the existing Directive needs to be modified extensively, but suggest the following measures:

- the Directive should be applied in such a way as to be technology neutral given that equivalent leased line services can be delivered through alternative forms of technology
- a larger margin of discretion should be accorded to NRAs when applying the Directive as its application will become necessary in fewer and fewer cases as markets develop towards full competition
- the dispute resolution procedure should be maintained for the foreseeable future especially in the context of international leased lines
- maintenance of the Directive until at least 2008 (when the authors expect to see most of the markets reviewed in this report attaining a high degree of competitiveness).

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