



Use of leased lines amongst medium businesses

A report of the key findings of a research study conducted by Continental Research on behalf of Ofcom

Published March 2006

Contents

| Section | | Page |
|---------|-------------------------------|------|
| 1 | Introduction | 1 |
| 2 | Executive Summary | 3 |
| 3 | Profile of medium businesses | 5 |
| 4 | Profile of leased lines users | 7 |
| 5 | Use of suppliers | 15 |
| 6 | Leased line purchasing | 21 |

Introduction

Background

The study's overall objective was to provide information on the size of the leased line market amongst medium sized businesses (i.e. those with between 51 and 250 employees).

Research Objectives

The research specifically aimed to establish:

- how many medium businesses were using leased lines
- the profile of businesses that used leased lines
- what types of leased line were being used, and which were more popular amongst which businesses
- how much medium businesses spent on leased lines, and how this differed between businesses
- awareness and availability of Ethernet and SDH

Methodology and Sample

In order to address the requirements to provide information on the leased line market amongst medium businesses, this report includes findings from both the Ofcom ongoing tracking survey of the small and medium business (SME) markets as well as a bespoke survey carried out with medium sized businesses who all had at least one leased line.

The ongoing SME Tracking survey provides Ofcom with data on small (1 to 50 employees) and medium sized (51 to 250 employees) businesses' usage of fixed, mobile and data communications. The last full quarter to report on leased lines was in August 2004 (wave 17). This data provided a good overview of how many medium businesses currently used leased lines and what the profile of these businesses was. The number of medium sized businesses interviewed for this quarter was 308 of which 31% had a leased line. The fieldwork for this survey was carried out between 9th and 25th August 2004.

In addition, the most recent SME Tracking survey (for which fieldwork for April and May 2005 has been completed) revealed 30% had a leased line. This is based on 131 interviews with medium businesses, and as this sample is smaller than the August 2004 wave, data has mainly been used throughout this report from the August 2004 survey.

As the questionnaires do change between waves on the SME Tracking survey, data has sometimes also been used from other waves carried out between August 2004 and May 2005.

The main survey which provided most of the data for this report was a dedicated survey amongst medium sized businesses, all of whom had a leased line. A total of

201 interviews were conducted between 17th May and 3rd June 2005. Quotas were imposed at the interviewing stage to ensure the sample reflected the profile of medium businesses with leased lines as identified by the August 2004 tracking surveys. The data was also weighted by business size (number of employees) using the August 2004 tracking data, to correct any minor sampling imbalances.

The sample for all surveys was sourced from Dun and Bradstreet.

All fieldwork was conducted by telephone from Continental Research's central London telephone centre. The agency is IQCS approved (Interviewer Quality Control Scheme), its interviewer training and supervision procedures meeting industry approved standards.

Telecoms decision making role of respondent

For both the SME Tracking surveys and the main Leased Line survey the person who made telecoms decisions for their business was interviewed. As telecoms decision making can involve several people within an organisation, especially the larger businesses with multiple sites, all were asked if they were responsible for all or just some of their business sites.

Figure 1 reveals that 92% of all interviewed on the main leased line survey had telecoms decision making responsibility for all of their sites.

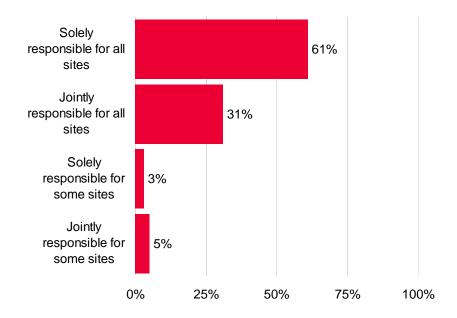


Figure 1: Responsibility for telecoms decision making

Base: All medium businesses with leased line (201)

It should therefore be noted that when the data is reported on the total sample of 201, a small proportion of the sample (8%) are sometimes referring only to the sites they managed as opposed to all the sites of their business.

Executive Summary

Use of leased lines increases with business size with some variation by sector and region

- Just under a third (31%) of medium sized businesses used leased lines. Larger businesses - both by turnover and employee size - were more likely to have leased lines. In addition, businesses that operate in the service, wholesale and retail sectors were more likely to have a leased line (35%) than those in manufacturing or distribution (26%).
- As with many other technically-advanced telecoms services, businesses in the South of England were more likely to have leased lines than those in other regions of the UK.

BT is the dominant supplier of leased lines amongst medium businesses

- BT was the dominant supplier of leased lines, with two-thirds (65%) using it, and 60% using BT as their sole leased line supplier. Smaller companies were slightly more likely to use BT than larger ones.
- The average annual spend on leased lines was £18,000. This was significantly higher for companies in the South (£46,000) than in the rest of the UK (£28,000)

While leased line contracts are reviewed around every couple of years businesses remain with their supplier for significantly longer periods

• The average length of a leased line contract (with their main supplier) was just under 2 years (1.9). However on average leased lines users had remained with their supplier for an average of just over 7 years (7.1), suggesting that many had renewed contracts with the same supplier.

A significant minority of telecoms decision-makers are unaware of which bandwidths their business uses

- Over a quarter (28%) of respondents were unaware what bandwidth their leased lines where. Smaller businesses were less likely to know what bandwidth they had than larger ones. Amongst those businesses that did know, a wide variety of bandwidths were used, with 2 Mbit/s the most popular (used by 40%).
- Low bandwidth leased lines (up to 8 Mbit/s) were used by 57% of medium businesses with leased lines. These were particularly popular amongst larger businesses (those with 101-250 employees). Analogue leased lines were more popular amongst businesses with 51-100 employees.

Decision-makers are even less aware of the technology being used suggesting heavier reliance on suppliers for technical support

- 41% of respondents were unaware of what type of technology (either Ethernet or SDH) their leased lines were based on. As with bandwidth, this figure was higher for smaller businesses (52%) than larger ones (41%).
- A wide variety of reasons for using the particular type of leased line were cited, with no single one dominating. Inheriting that type when the respondent started work in their position was the main reason (mentioned by 17%), followed by cost (15%), and then geography (12%).
- Overall, awareness of bandwidths and technology of leased lines was higher amongst larger businesses, who were also more likely to use more advanced technology.

Businesses do not have a clear idea as to whether regional price variations exist

- There was no clear idea as to whether leased line costs varied by region half (47%) stated they did not know, while equal proportions thought they did (27%) and did not vary (26%). Larger businesses (30%) and businesses in the South (32%) were more likely to consider regional variations did exist.
- Just over a half (53%) said they would choose different suppliers if regional prices existed. Larger businesses (101 to 250 employees) less likely to say they would change their purchasing behaviour on this basis than smaller ones who were more undecided.

Profile of medium businesses

Profile of medium businesses

The definition used for a medium business is one that employs between 51 and 250 employees. Based on information supplied by Dun and Bradstreet which was used to set the interviewing quotas and weighting factors for the on-going Ofcom SME Tracking surveys, the profile of all medium sized business in the UK is shown in figure 2 below. This chart also compares the profile of businesses that had a leased line. Overall this was quite similar to the profile of medium sized businesses generally. The main difference was that more businesses with a leased line had between 101 to 250 employees, again showing that larger businesses were more likely to have a leased line than those medium businesses with between 51 and 100 employees. This is further confirmed when information from the August 2004 tracker is looked at, which shows only 3% of smaller businesses (i.e. those with up to 50 employees and not examined in this report) had a leased line.

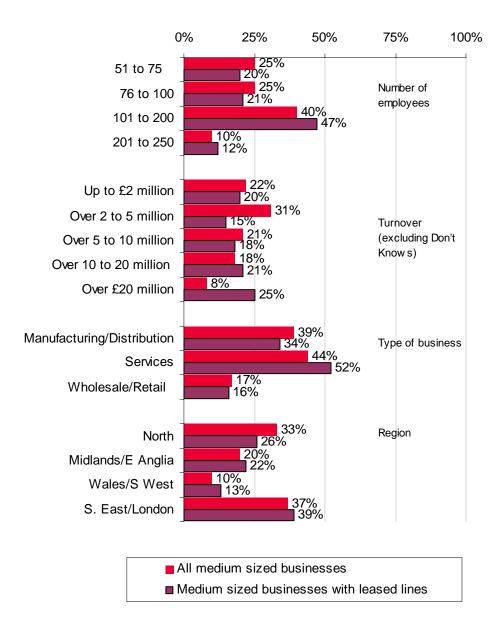


Figure 2: Profile of all mediums sized businesses vs. profile of medium sized businesses with leased lines

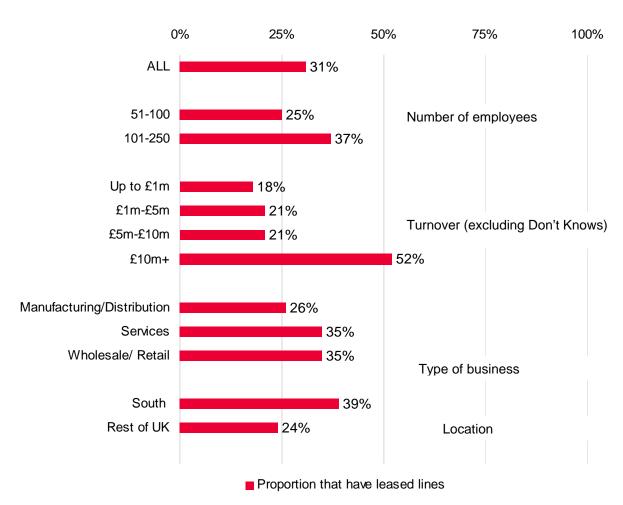
Base: All medium sized businesses surveyed for SME Tracking Survey Jan-Mar 2005 (332) / All medium sized businesses with leased line (201)

Profile of leased line users

Profile of businesses using leased lines

In May 2005, 30% of medium businesses used leased lines. This represents no significant change from the figure in August 2004 (31%) indicating that the leased line market had shown little signs of growth in new customers during the previous 8 months. Figure 3 shows the proportion of all medium businesses that had a leased line in August 2004. As with many telecom services (particularly those which are more technologically advanced), propensity to have a leased line increased with business size, with respect to both turnover and number of employees. It can also be seen that businesses in the South of England were more likely to have this technology than those in the rest of the UK

Figure 3: Proportion of medium-sized businesses that have a leased line, by business type



Base: All medium sized businesses surveyed for SME Tracking Survey August 2004 (308)

Types of fixed lines being used

Both analogue and ISDN digital lines were used extensively by medium sized businesses with leased lines. With regards to leased line usage, lines with up to 8Mbit bandwidth were the most popular especially amongst the larger businesses with over 101 employees.

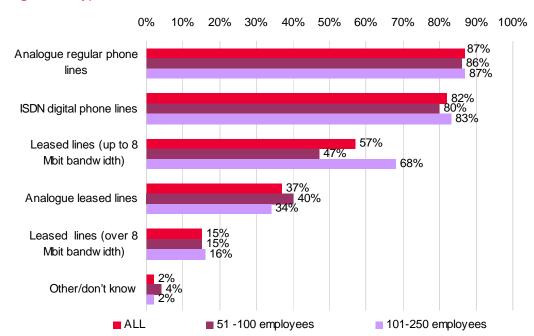


Figure 4: Types of fixed line used

Base: All medium businesses with leased line (201)

The higher capacity leased lines with over 8Mbit bandwidth were more likely to be used by businesses in the South (London, South East, South West) compared to businesses based in the rest of the UK. In the South, 20% had these larger leased lines compared to 11% elsewhere.

Total number of leased lines

The average number of leased lines amongst medium sized business with a leased line was 7.1. Larger businesses (i.e. those with 101 to 250 employees) had slightly more lines (7.9) than those with 51 to 100 employees who had an average of 6.0 lines.

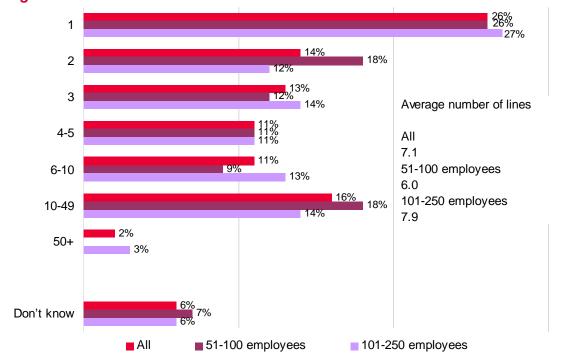


Figure 5: Total number of leased lines

Base: All medium businesses with leased line (201)

Number of sites and number of sites connected by leased lines

The average number of sites that medium business with leased lines had was 4.6. Just under four in ten (38%) had only one site. Figure 6 below shows the number of sites medium sized businesses with leased lines had and how many sites each business had that were connected to a leased line.

As not all sites were connected by a leased line, the average number of sites with a leased line connection was lower (2.9) than the total number of sites (4.6).

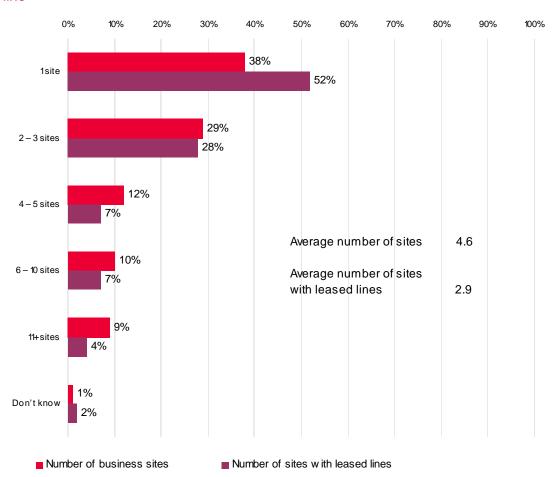


Figure 6: Number of sites business had and numbers of sites connected to a leased line

Base: All medium businesses with leased line (201)

Businesses in the South had more sites connected to leased lines (average 3.2 sites) compared to those elsewhere in the UK (2.5 sites).

Leased lines bandwidth

The most widely used bandwidth was 2Mbit (40%). The other most widely used bandwidths were 1Mbit (17%) and 64 Kbit (14%). Figure 7 below shows the bandwidth sizes used by medium sized businesses. Differences do occur between the smaller (51 to 100 employees) and larger (101 to 250 employee) businesses. In particular the 2Mbit lines are more widely used by the bigger businesses and the 1Mbit lines used by the smaller businesses. In addition, the number of businesses unaware of the size of their leased lines was significant (28%). In particular, the smaller businesses were less likely to know (34%). This could be because they rely more on advice from their supplier and allow them to decide on the type of leased line to provide. The respective figure for the bigger businesses unaware of the bandwidth of their lines was 24%, indicating they are more informed.

0% 10% 20% 30% 40% 50% 40% 2Mbit 31% 47% 17% 21% 1Mbit 14% 64Kbit 256 Kbit 6% 512 Kbit 8Mbit 34Mbit 10 Mbit 622 Mbit 1 Gbit Other 28% Don't know ■ 51-100 employees ■ 101-250 employees All

Figure 7: Bandwidth of leased lines

Base: All medium businesses with leased line (201)

Analogue or digital leased lines

As just commented upon, the most widely used bandwidth was 2Mbit and the majority of these 2Mbit lines were digital. A similar pattern emerged for the next most used bandwidth which was 1Mbit. 64Kbit lines tended to be a mix of both analogue and digital.

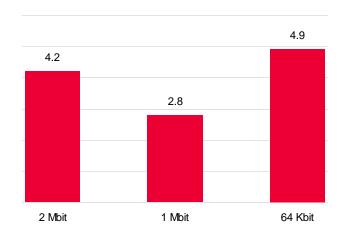
Figure 8: Use of analogue or digital lines by capacity

| | 2Mbit users (Base 78) | 1Mbit user (Base 35) | 64Kbit users (Base 27) |
|-------------|--------------------------|-------------------------|---------------------------|
| Analogue | 9% | 5% | 39% |
| Digital | 71% | 69% | 39% |
| Both | 14% | 20% | 13% |
| Don't' know | 6% | 6% | 9% |

It should be noted the base sizes for the 1Mbit and 64 Kbits bandwidths are small and caution should be observed when making any statistical conclusions from these findings. For this reason users of other bandwidth speeds have not been reported as most of these base sizes were under 10 respondents.

The number of lines each business had by bandwidth was also collected. Again as the base sizes are small, only the main bandwidth sizes used have been reported and statistical caution should be made when observing this data.

Figure 9: Average number of leased lines by bandwidth

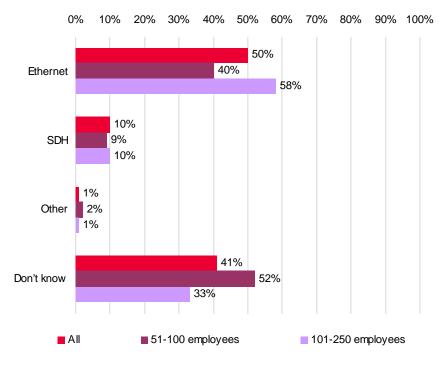


Base: All with each bandwidth (78/35/27)

Ethernet/SDH technology

A significant number were unaware (41%) of the type of technology their leased lines were based on. This was especially apparent for smaller businesses with 51 to 100 employees (52%). Amongst those able to answer, the most used technology was Ethernet (50% of all medium businesses with leased lines).

Figure 10: Type of technology leased lines based on



Base: All medium businesses with leased line (201)

To further explore this subject all were asked whether they knew if both Ethernet and SDH lines were available to their business at all or some of their sites. Just over a half (54%) said both were available and only a few (5%) said they were not. Again a high number (41%) were unsure (52% amongst those with 51-100 employees, and 33% amongst those with 101-250 employees).

As four in ten medium businesses with leased lines were unsure about the technology their leased lines were based on, this suggests either little had been done to communicate this technology by suppliers, or that businesses were happy for their supplier to deal with decisions concerning line technology and did not get involved.

Reasons for using type of leased line

The main reasons why medium sized businesses used the types of leased lines they had are shown in figure 11. The question was asked unprompted. There was a wide range of reasons, with no single one dominating.

It appears that the primary reason is inertia, as 17% of respondents had just continued using the same type of line that was already in place when they arrived in their job. This could be because it suited its purpose perfectly well and there is no reason to change, or that it is a lower-priority system that isn't reviewed as regularly as others. 15% cited price or value for money, which is often ranked highly in surveys assessing reasons for using a specific telecoms technology or supplier. Reliability, which is also frequently ranked highly, was only mentioned by 7% of respondents.

The distance and geographical positions of their sites was mentioned by 12%, and one in ten stated a general "it suits our business needs".

The quality of the service provide was mentioned by 8%, and 7% stated they didn't have a choice and that type of leased line was the only one available. All other reason were each mentioned by one in twenty respondents or fewer.

Figure 11: Reasons for using type of leased line (unprompted)

| | All |
|---|------------|
| | (Base 201) |
| Something I inherited/here when I arrived | 17% |
| Price/value for money | 15% |
| Distance/geography of sites | 12% |
| Suits our business needs | 10% |
| Quality of service | 8% |
| Only one available | 7% |
| Reliability | 7% |
| Data transfer use | 5% |
| Recommended by supplier | 5% |
| Head office/corporate policy | 4% |
| Recommended by BT | 4% |
| Internet use | 4% |
| Convenience | 3% |
| Connects our different sites | 3% |

| IT dept recommended it | 3% |
|-------------------------------------|----|
| Best one available | 2% |
| Not offered any choice | 2% |
| Speed | 2% |
| Security | 2% |
| Impressed with bandwidth | 2% |
| Standard line issued to most people | 1% |
| Other | 7% |
| Don't know | 8% |

Use of suppliers

Suppliers used for all fixed services

From data supplied by the Ofcom SME January to March 2005 Tracking survey, BT was the dominant supplier across all medium sized businesses (i.e. includes those medium sized businesses who did not use lease lines). 80% of all medium sized businesses used BT either exclusively or with another supplier. The figure for those who only used BT and no other supplier for their fixed services was 44%. Cable users accounted for 10%. A wide range of other suppliers was used, the main ones being Opal (5%), Cable and Wireless (4%), and MCI Worldcom (3%). All other suppliers (of which there were many) were used by 2% or less.

BT was used by a similar number (85%) of medium sized businesses who used leased lines. Solus BT usage (36%) was slightly lower than for all medium businesses, indicating that businesses with leased lines were more likely to have more than one supplier for their fixed services. This is confirmed when the number of businesses who used multiple suppliers is compared. For all medium businesses, 37% used multiple suppliers whereas for medium businesses who used leased lines, multiple supplier usage rose to 50%.

Figure 12 below summarises this data. Individual suppliers whose usage was below 3% have not been included in this table.

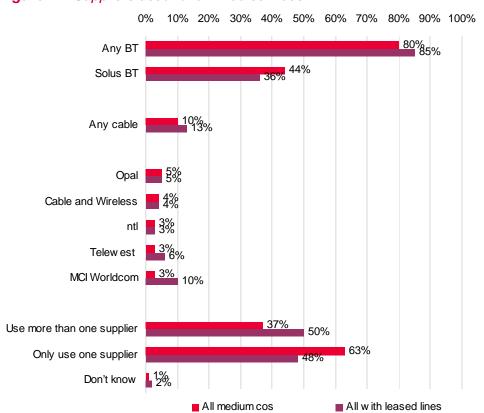


Figure 12: Suppliers used for all fixed services

Base: All medium sized businesses surveyed for SME Tracking Survey Jan-Mar 2005 (332) / All medium sized businesses with leased line (201)

The suppliers used for leased line services were quite similar to the suppliers used for all fixed services as reported in the section above. Once again, BT was the dominant supplier. As leased lines only represent one type of fixed service the number of businesses who use just one supplier for their leased lines was significantly higher (89%) compared to the number of businesses using one supplier for all their fixed services (48%).

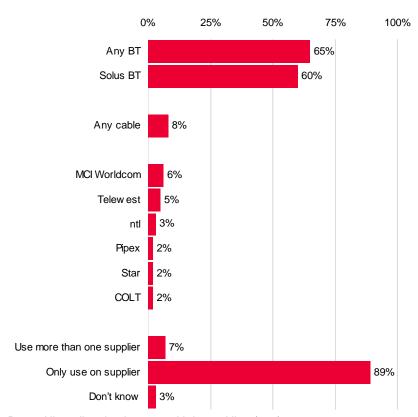


Figure 13: Suppliers used for leased line services

Base: All medium businesses with leased line (201)

The larger medium sized businesses (i.e. those with 101 to 250 employees) were slightly less likely to use BT and more likely to use a cable business than the smaller (51 to 100 employee) businesses.

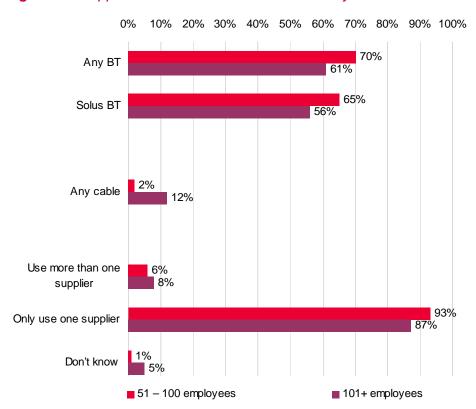


Figure 14: Suppliers used for leased line services by business size

Base: all medium businesses with leased line 201

Although the vast majority (89%) use only one supplier for their leased lines, 7% use multiple suppliers (3% weren't sure how many were used). Those that use more than one supplier were asked who their main supplier was. Results were very similar to the proportions using all suppliers, as can be seen in figure 15 below.

BT was again more likely to be used by smaller medium businesses, with two-thirds (67%) of businesses with 51-100 employees using BT as their main supplier of leased lines, compared to 56% of businesses with 101-250 employees.

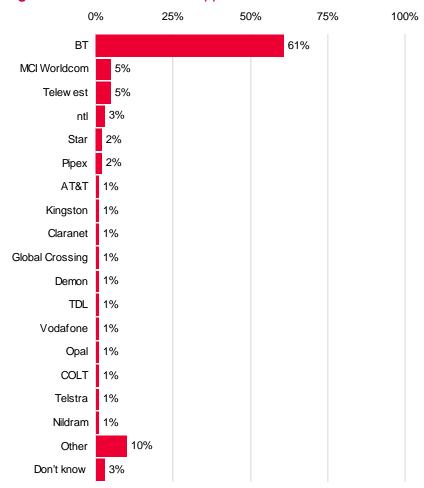


Figure 15: Main leased line supplier

Base: All medium businesses with leased line (201)

Fixed line spend

Although 85% of medium businesses with a leased line used BT, many also used another supplier as well, (as shown in figure 15 above) where only 36% were solus BT users. For this reason BT accounted for considerably less (48%) of all fixed line expenditure amongst medium businesses with a leased line. This was however still considerably ahead of MCI Worldcom (10%) and Cable and Wireless (4%). All others were 2% or less and have not been included in figure 16 below.

48%

10%

4%

4%

3%

4%

BT

MCI

Opal

Cable and

Wireless

Figure 16: Breakdown of total fixed line expenditure by supplier

Base: All medium businesses with leased line (201)

The average amount spent on all fixed line services by medium sized businesses with a leased line was £36,000 per annum (note that all spend figures are self-reported estimates, and have been rounded to the nearest £1,000). This figure included both regular lines as well as leased lines. It also included equipment, line rental, call costs and VAT. Mobile supplier costs were excluded. For all medium sized businesses (70% of whom did not have a leased line) the average annual spend on all fixed line services was £30,000 ex VAT. Their lower spend is likely to be for two reasons:

1) the higher incidence of smaller (51 to 100 employees) businesses and 2) a lower usage of telecoms overall.

The data for all medium businesses was taken from the January – March 2005 Ofcom SME Tracker survey. It should be noted that the question asked about **monthly** spend and this figure has been multiplied by twelve to give an annual figure of £30,000. On the main leased line survey the question asked for an annual spend figure. Amongst the medium sized businesses with a leased line, there was a noticeable increase in fixed line expenditure amongst those businesses in the South.

£28,000

UK (excluding South South)

Figure 17: Fixed line annual expenditure by region

Base: All medium businesses with leased lines (201)

Spend on leased lines

The average annual spend **on leased lines** by medium sized businesses with a leased line was £18,000. One in five (20%) were unable to provide a figure, which is higher than the 11% unable to provide an overall figure for their fixed cost expenditure. This could in some cases be because leased line costs were not scrutinised or itemised separately from other fixed telecom costs.

Larger businesses (i.e. those with 101 to 250 employees) had a higher annual leased line expenditure (£21,000 per annum) than those with 51 to 100 employees (£13,000 per annum). Again the South shows a significantly higher annual spend (£22,000) than the North/Midlands (£13,000).

Spend amongst businesses that used only BT as their leased line supplier, and also those that used BT as their main leased line supplier was lower, at £12,000 for both groups. This reflects the fact discussed earlier in this section that smaller businesses (that have a lower spend on leased lines) were more likely to use BT than larger businesses.

Leased line purchasing

Average length of leased line contract with main supplier

Figure 15 showed the main leased line suppler used by businesses and illustrated below are the average lengths of these contracts. Generally medium businesses with leased lines have c. 2 year contracts (1.9 years).

Ower 1 to 2 years

Over 2 to 5 years

Over 5 to 10 years

Over 10

1%

Figure 18: Length of contract from start to end with main supplier of leased line

Base: all medium businesses with leased line 201

Don't know/varies too

much

However, on average businesses have been supplied by their current (main) supplier for significantly longer than their average contract length – around 7 years. This timescale was quite consistent across most types of businesses. As most had been with their main supplier considerably longer in total, this suggests that although these businesses are reviewing their contracts frequently, many renew their contracts with the same supplier.

21%

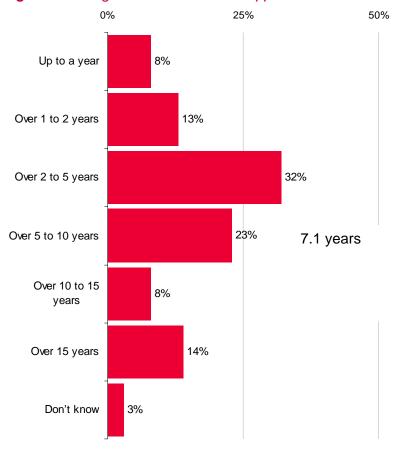


Figure 19: Length of time with main supplier of leased line

Base: all medium businesses with leased line 201

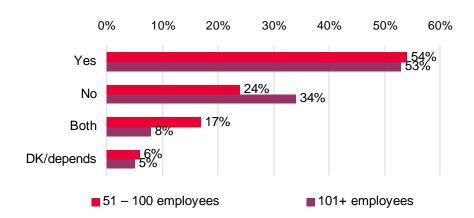
Impact of price on the choice of leased line supplier

Just under a half (47%) were unaware if prices for leased lines varied by region. A quarter (27%) thought they did vary by region and a similar number (26%) thought they did not vary by region.

The bigger businesses with 101 - 250 employees were more likely to say that there were regional variations (30%) than those with 51 to 100 employees (23%). Businesses based in the South were also more likely to say regional pricing variations existed (32%) than those elsewhere in the UK (22%).

When asked "If you became more aware that the price of leased line services varied by region, would you choose different suppliers in different areas to take advantage of any price differential?". Just over a half (53%) said they would choose different suppliers. The larger businesses with 101 to 250 employers were more likely to say "no" than the smaller ones who were more undecided.

Figure 20: Whether would choose different supplier if aware regional price differences existed



Base: all medium businesses with leased line 201

Regional differences also occurred, with businesses in the South being less likely to say they would choose suppliers based on price (49%) than those in the rest of the UK (57%).

For those unlikely to change suppliers if price differences were available regionally, the main reasons for this were:

- happy with current supplier
- pleased with quality of service of current supplier
- contractual arrangements
- changing system away from leased lines to MPLS/other services
- increased admin if have different suppliers
- wanting to keep consistency
- easier to deal with one supplier