



Narrowband Multi-channels Market Research

Research Document

Publication date: 4 May 2010

Contents

Section		Page
1	Executive Summary	2
2	Methodology	4
3	Company Demographics	6
4	Usage of Services	9
5	Role of Key Service in Organisation	17
6	Functional value of key service in organisation	20
7	ISDN30: Switching behaviour and intention	22
8	IP-based services: Experience of migrating from ISDN30 to IP-based services	26
Annex		Page
1	Questionnaire	29

Section 1

Executive Summary

ISDN30 is a multiline digital telephone line service that is widely used by businesses.

As part of the ISDN30 retail and wholesale market reviews, we commissioned market research to gain a better understanding of current trends in this market, in particular to:

- Assess the reasons why businesses are using ISDN30 services;
- Gauge the length of time for which they are likely to continue to use ISDN30 services;
- Explore whether IP technologies are regarded as a valid substitute for ISDN30 services or a migration path; and
- To understand the experience of businesses who have already migrated from ISDN30 to IP-based services.

The profile of companies who use ISDN30 and IP-based services is not known. Therefore, it is not possible to weight the data to be representative of all companies who use these products. Therefore, the research should be viewed as information about a sample of companies who use these services rather than the market as a whole. However, the sample was constructed to be representative of the UK business population, in terms of industry sector and region, as a whole.

Within this report, ISDN30 companies refers to those companies who use ISDN30 rather than IP-based solutions for the majority of their functions and IP-based companies are those which have migrated at least two-thirds of their ISDN30 functionality to IP-based alternatives.

ISDN30 remains an important telecoms service to many companies. 93% of ISDN30 companies use it as a primary telephone service. Its role in the majority of companies is for voice access with 98% of companies using it to make out-going and receive incoming calls. 86% of companies class in-coming calls as ISDN's most important role in their company and 84% that out-going calls are the second most important role.

ISDN30 is valued for its reliability with 59% of companies including that among its functional values and 36% saying that is the most important value. ISDN30's voice capability and ease of use are also valued with 45% and 41% respectively of companies mentioning these values.

The majority of companies (84%) are not currently considering switching away from ISDN30 and intend to continue using the service for several years. When asked why they are not considering moving away from ISDN30, 46% gave its reliability and 40% that it meets the current needs as a reason.

Most companies (86%) are aware of IP-based alternatives to ISDN30. Of those companies who are aware, 21% of respondents are considering moving at least some ISDN30 to IP within the next 12 to 24 months. 39% of companies that are considering switching some functionality away from ISDN30 are either planning to trial IP-based services or have decided to proceed with implementation based on an earlier trial. However, other companies have trialled IP-based services and decided not to implement them. When asked

about alternatives and possible replacements for ISDN30, IP-based services are frequently mentioned and **IP-based services seem accepted as a replacement route for some companies at least.**

Those companies who are considering moving away from ISDN30 (13%) tend to be large and those who use ISDN30 as a secondary service. The main benefits from moving away from ISDN30 are given as lower calls costs and increased value for money by 63% and 41% of companies considering switching respectively. 62% (of those considering moving) have no concerns about moving away from ISDN30 but a further 27% have concerns about the reliability of alternative services in general.

Companies who have migrated from ISDN30 to IP-based services tend to be larger and have more complicated telecoms needs (more services, higher spends, more sites) than those using ISDN30. For most of them, migration to IP-based services was triggered either by a general upgrade (51%) or a switch replacement (23%). The main reasons for moving away from ISDN30 related to cost of calls (43%), the quality of service (38%) and reliability (35%). 75% of companies needed to purchase new equipment to implement the migration and 70% have saved money on their annual telecoms costs. However, 50% of companies have saved under £15k per annum with a corresponding spend of £50k or less.

Methodology

Ofcom commissioned Prodata, an independent research company, to carry out two business surveys in order to:

- Assess the reasons why businesses are using ISDN30 services;
- Gauge the length of time for which they are likely to continue to use ISDN30 services;
- Explore whether IP technologies are regarded as a valid substitute for ISDN30 services or a migration path; and
- Understand the experience of businesses who have already migrated from ISDN30 to IP-based services.

The two business surveys comprised of:

- 469 telephone interviews with companies using mainly ISDN30 products;
- 6 online interviews with companies using mainly ISDN30 products; and
- 156 telephone interviews with companies who have migrated from using ISDN30 to IP technologies.

Information on businesses was provided by Sample Answers who compile lists from a variety of sources, including Companies House, phone directories and independent research. These lists provide company contact details and information about their size and the sector they operate in. Companies on the list were then phoned by the research agency and asked three initial screening questions. Depending on the answers to these screening questions, respondents were either not eligible for the purpose of the research, asked the ISDN30 questions or asked the IP-based questions. To be eligible for the research, a company had to have more than 20 employees and at least one of the two services.

As many companies have both service types, to reduce the burden on the respondent, companies were only asked the most relevant sections on the questionnaire based on their key service. ISDN30 companies relate to those companies who carry out more than 66% of their business functionality on ISDN 30, and IP-based companies for those who carry out more than 66% of their business functionality on IP. The target sample was telecoms decision makers.

The original proposal was for was for 200 interviews with IP-based services. However, due to the low incidence of these services in the market (less than 2%), 156 interviews were achieved during the fieldwork period.

The original plan for the research was to offer companies the choice of either a telephone or online interview at their convenience to encourage participation. It was envisaged that approximately 25% of the interviews would be online. However, companies preferred telephone interviews and the great majority of interviews were telephone-based.

To enable analysis by company size, quotas were set for large (250+ employees), medium (50-249 employees) and smaller companies (20-49 employees). The quotas set for ISDN30 companies was 150 large, 200 medium and 100 small and for IP-based services, were an

even spread by size. The numbers achieved were for ISDN30, 115 small, 210 medium and 150 large. For IP-based services, due to the lower than expected incidence the number achieved were 35 small, 51 medium and 70 large. For analysis purposes, IP-based small and medium size companies are combined. Companies with less than 20 employees were excluded as they were not the target market for either ISDN30 or IP-based products.

The sample was designed to be representative of the total UK business population in terms of geographical distribution and industry sector code by size band. However, this does not mean it is representative of companies who use ISDN30 and IP-based services. Due to a lack of information about the UK distribution of these services, this data has not been weighted. Therefore, the attitudes and usage patterns of medium and large companies are over-represented in the results.

The following report is based upon the combined findings of the two surveys. The initial sections outline the company demographics. After that, each section compares, where relevant, the two surveys followed by more detailed analysis of the ISDN30 results.

The following definitions are used in this report:

- ISDN30: the standard digital telephone line service used by larger businesses most commonly for telephone calls, but also for data and video services. ISDN30 provides up to 30 channels (lines) each capable of supporting a separate voice or data call. ISDN30 lines are typically connected directly to a business telephone system (PBX);
- IP technology: In this context, services based on internet protocol technology (IP) that are being used as a replacement for ISDN30 services. This includes Voice over IP (VOIP), telephony services including SIP Trunking solutions and Centrex services provided by IP networks (so called 'hosted VOIP' solutions).
- Small business: Organisation with less than 50 employees
(here restricted to 20-49 employees)
- Medium business: Organisation with 50-249 employees across all UK sites.
- Large business: Organisation with 250 employees across all UK sites.

Section 3

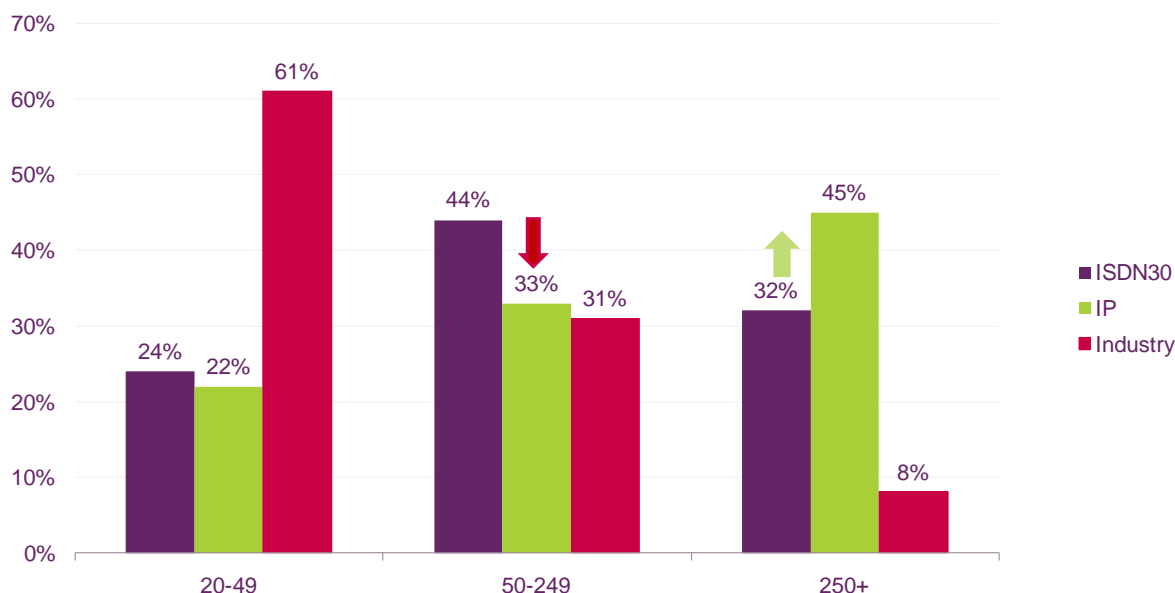
Company Demographics

Number of employees

Our survey set quotas by number of employees. Therefore, it is not possible to quantify the incidence of ISDN30 and IP-based services across the business population as a whole. To qualify for the research, a company had to possess one of these products.

Due to the necessary relaxation of the size quotas on IP-based services, a greater proportion of large companies were interviewed than originally intended. This explains the significant differences in number of employees by product in the chart below.

Figure 3.1: Number of employees



*Question. Approximately, how many employees does your company/organisation have in the UK?
Base: All with ISDN30: 475; All with IP-based services: 156*

Annual turnover

As there is a strong relationship between company sizes, annual turnover and telecoms spend, the impact of the difference in the profile of IP-based and ISDN30 companies by size will also impact on revenue and telecoms spend at an overall level.

However, a few comments can be made. The large companies, regardless of whether they use ISDN30 or IP-based service as their key service, are much more likely to have a turnover of more than £20m, spend more than £100k a year on telecoms and to have five or more sites. For ISDN30, at least 68% of companies using ISDN who have a turnover of £20m or more, have more than 5 sites or spend more than £100k on telecoms have more than 250 employees. The equivalent figure for IP-based companies is at least 75% in three categories.

These large companies tend to have more complicated telecoms requirements (more services, higher spends, dedicated IT manager) and differ from smaller companies in many ways. They also tend to use a mixture of suppliers for their key service – mainly BT and another large, nationally distributed operator, such as Virgin Media or C&W/Energis.

IP-based services tend to be concentrated among large companies and this is borne out by the research into switching from ISDN30 to IP. There are a large range of company sizes, in terms of turnover, represented in the research. For the smaller companies in terms of size and number of sites, the expected annual turnover was under £50m. However, companies with over 250 employees and multiple sites have on average an annual turnover of £100-200m.

IP-based companies tend to be larger in revenue terms than ISDN30 companies. The average revenue across all IP companies is £100m compared to £45m for ISDN30.

Figure 3.2: Annual turnover (£m)



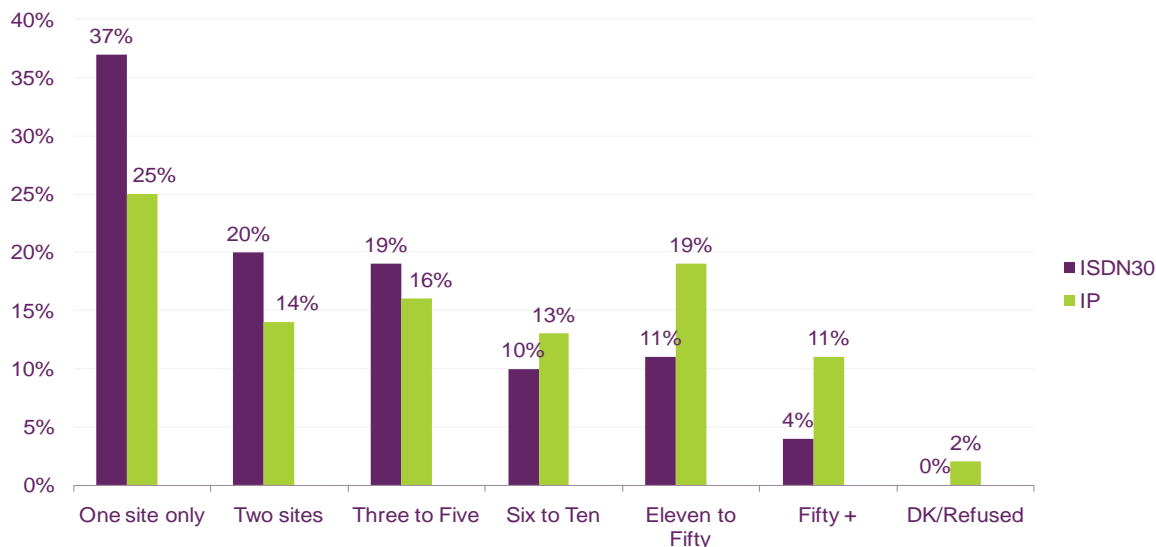
Question. What would say the annual UK turnover for your company is?

Base: All with ISDN30: 475; All with IP-based services: 156

Number of sites

Outside of the large companies, most ISDN30 companies in the survey who use ISDN30 as a key service have less than 5 sites while IP-based companies have 5 sites on average. The large companies have, on average, 36 sites for ISDN30 and 62 sites for IP-based services.

Figure 3.3: Number of sites



Question. How many sites, outlets and branches, including the one where you work, does your company have in the UK?

Base: All with ISDN30: 475; All with IP-based services: 156

Decision making power

A decision maker in a large company is more likely to have sole decision making powers than in a company with fewer than 250 employees. If authority is shared between several people in a company, then that company is less likely to have switched ISDN30 supplier in the past. Partial responsibility for telecoms decision making is linked to purchasing ISDN30 services as part of a bundle.

All respondents taking part in the research had some level of involvement in telecoms decision making.

Section 4

Usage of services

This section examines usage, purchasing and supplier decisions, for both ISDN30 and IP-based services in more detail.

Annual spend on telecoms

As mentioned above in section 3, there is a strong relationship between numbers of employees and spend on telecoms. However, across all sub-groups, ISDN30 companies spend significantly less on telecoms than IP-based companies. 29% of companies who use ISDN30 spend less than £24,000 a year on telecoms, compared to 18% for those who use IP-based services.

Figure 4.1 Annual spend on telecoms (£'000)



Question. Approximately, how much does your company spend annually on business communications services within the UK?

Base: All with ISDN30: 475; All with IP-based: 156

Annual spend on key service

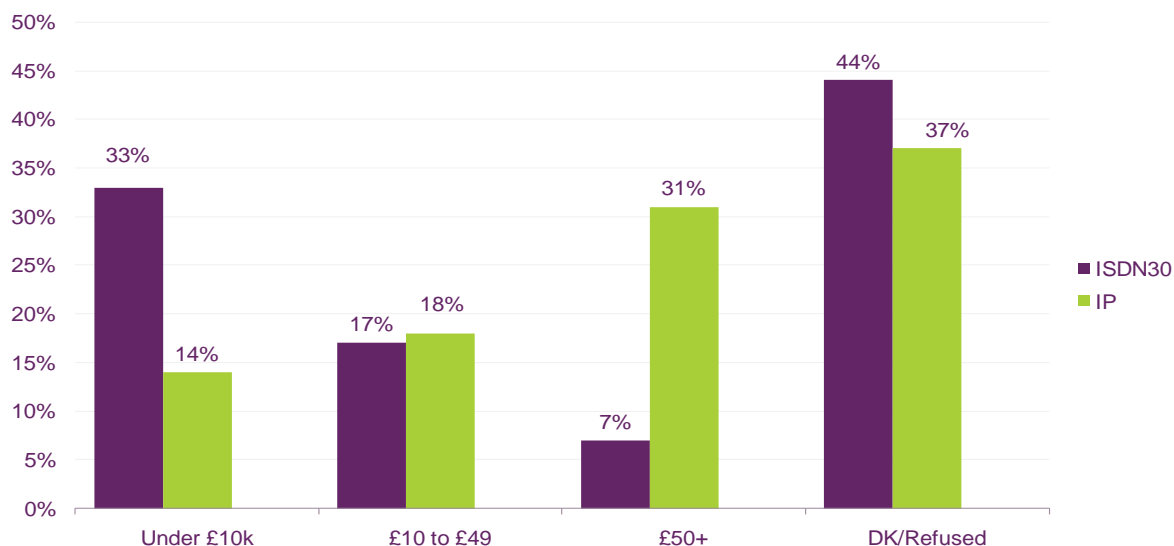
On average, IP-based companies spend £466k per year on these services which is about 20% of their total telecoms spend. In contrast, ISDN30 companies tend to spend about £25k or 10-15% of their annual telecoms spend on the service.

31% of companies spend over £50k per annum on their key IP-based services. By comparison, 33% of companies who use ISDN30 spend under £10k on it.

Those companies who use ISDN30 and have only one site or have fewer than 50 employees spend just over 30% of their telecoms spend on ISDN30.

Companies who are intending to switch away from ISDN30 in the next year spend a lower percentage of their telecoms spend on ISDN30, on average 4%. These companies are more likely to use ISDN30 as a supplementary or back-up service.

Figure 4.2 Annual spend on key service £'000 (either ISDN30 or IP-based)



Question. Approximately, how much does your company spend annually, across all sites, on ISDN30/IP-based services?

Base: All with ISDN30: 475; All with IP-based: 156

Type of IP services used

Those companies who have predominately migrated to IP-based services were asked which services they used. Hosted VOIP was the most popular service with 69% of companies mentioning it. SIP trunking was the next most popular with 35% of companies using it, and was mentioned more by companies using a mix of BT and another provider. IP Centrex is used by 17% of companies but is less popular with those who are not supplied by BT (9%). Internal VOIP is also used by 8% of companies and unspecified other products by 10%.

Number of ISDN channels

ISDN30 companies were asked how many ISDN30 channels they subscribed to. ISDN30 can support up to 30 channels (one subscription). 59% of companies purchase one subscription and these companies tend to be small-medium and to use ISDN30 as a primary service. 39% of companies have more than one subscription and these are dominated by large companies of whom 51% have three or more subscriptions.

Bundling of ISDN30 services

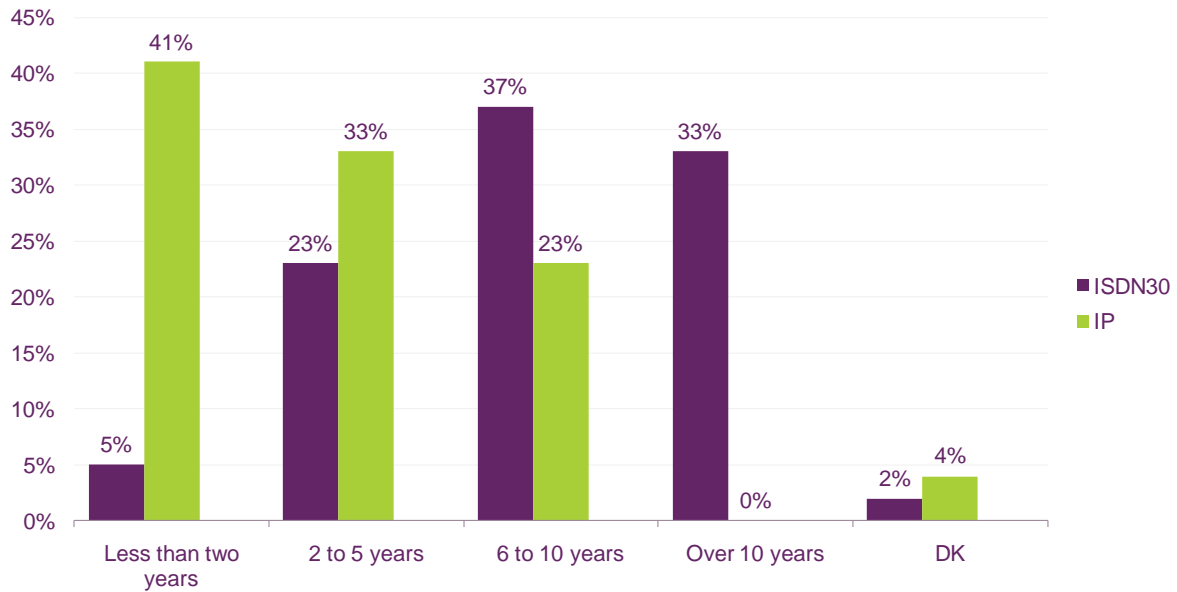
63% of ISDN30 companies purchase it as a stand-alone service. 25% purchase it as part of a package which is managed in-house while 4% outsource management of ISDN30 as part of a larger package. Companies with a high telecoms spend are more likely to purchase ISDN30 as a standalone service as are those who use it as a primary service. ISDN30 is more often sold as part of a package by alternative providers than by BT.

The services which are most often bundled with ISDN30 are PSTN telephony (48%) and ADSL/cable modem (44%). Less often, it is bundled with leased lines (31%), call management facilities (26%) and a PBX or Centrex service (18%). Companies who purchase from BT only are most likely to purchase both ISDN2/2e and ADSL.

Length of time using key service (ISDN30 or IP-based)

70% of companies have been using ISDN30 for more than five years. On average, large companies have been using the service for ten to eleven years. IP-based services are more recent in roll-out and 41% of companies using them have had them for less than two years.

Figure 4.3 Length of time with service



*Question. Approximately, how long have you been using ISDN30/IP-based services?
Base: All with ISDN30: 475; All with IP-based: 156*

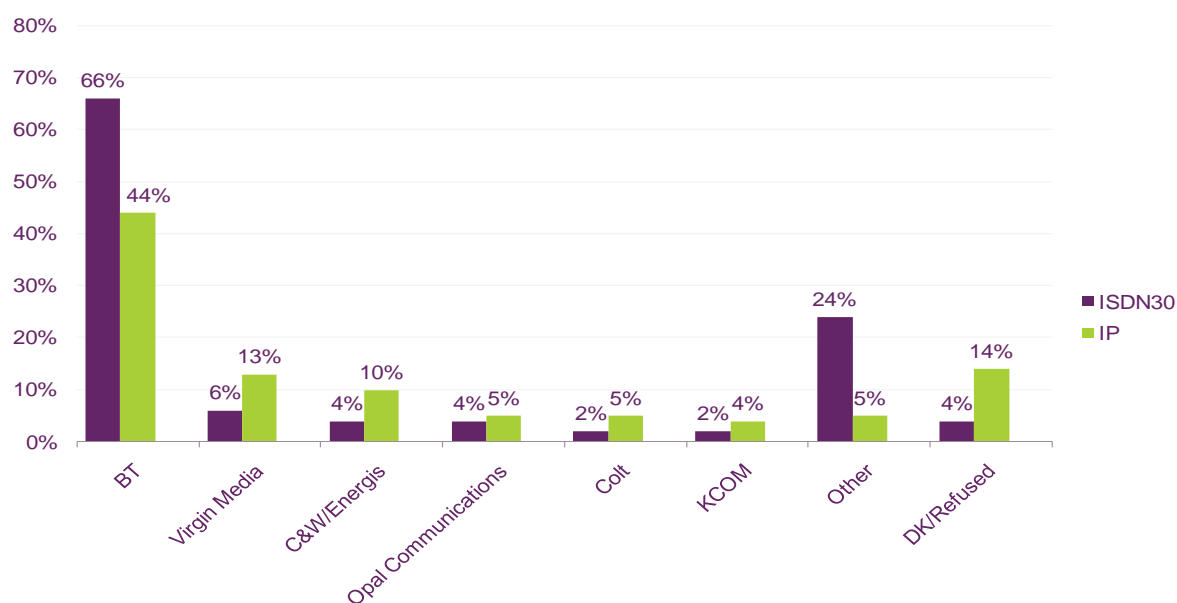
Supplier used for key service (ISDN30 or IP-based)

ISDN30 companies are more likely to buy from BT or a small local supplier. IP-based products are more likely to be supplied by a large name competitor to BT, such as Virgin Media or C&W/Energis. This is especially true if the IP-based service has a secondary rather than primary function.

The most popular alternative suppliers for ISDN30 are Virgin Media, Opal Communications, C&W/Thus, Daisy Communications, Colt Communications, AT&T and KCOM. There are some regional differences with C&W/Thus being more popular in Scotland and Colt Communications in London.

Large companies are more inclined to use a mix of suppliers, namely BT and another large, nationally distributed company (such as C&W/Energis or Virgin Media). Small/medium companies are less likely to be with BT or C&W/Thus. AT&T is most likely to supply ISDN30 to companies with five or more sites. 51% of companies with only one site and 48% of those who spend between £24k and £99k on telecoms obtain their ISDN30 service from small, local providers.

Figure 4.4: Supplier



Question. Which supplier do you use for ISDN30/IP-based services?

Base: All with ISDN30: 475; All with IP-based: 156

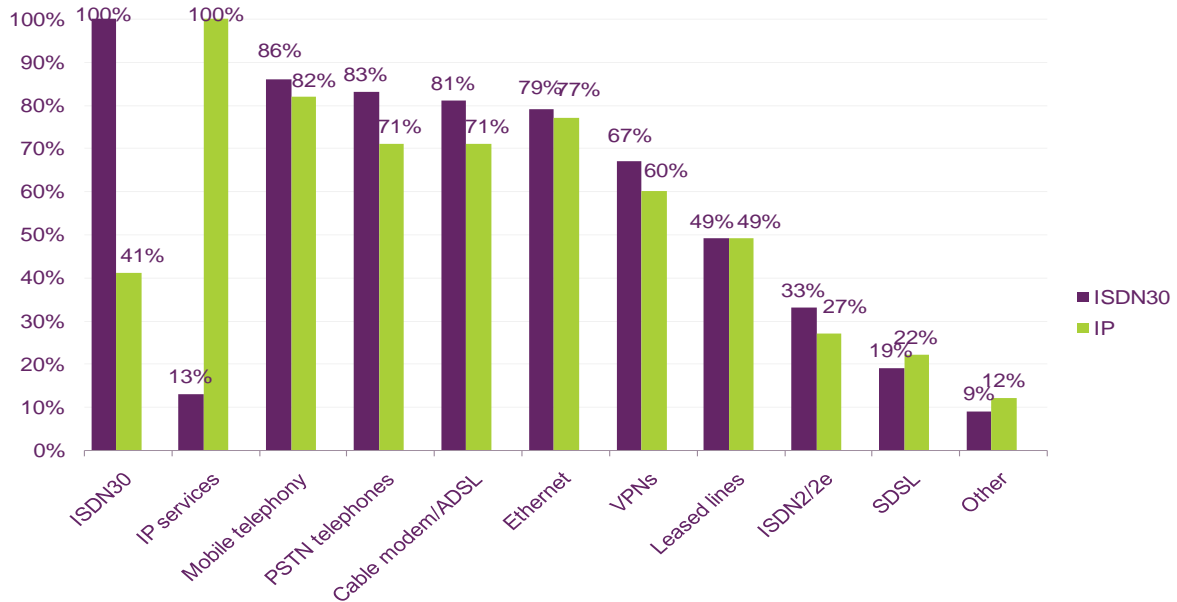
All analysis and reporting is based on unweighted data. The sample was designed to be representative by region and industry sector. However, in order to analyse results by different sizes of company, it was necessary to over-sample medium and large companies. This is usual in business research. If this was not done, then approximately 63% of companies interviewed would have between 20 and 49 employees and their experience may be different from that of larger companies.

Ofcom receives industry returns on the number of ISDN30 subscribers. These returns show that there are approximately 3.2m ISDN30 subscribers in the UK and BT's market share is 45% (Q3 2009). The reason for the difference between the industry data and survey data is that large companies are more likely to be with BT and such companies are over-represented in the survey.

Use of other services

13% of ISDN30 companies who predominately use ISDN30 also use IP-based services. Similarly, 41% of companies who mainly use IP-based services retain some level of ISDN30 services. Otherwise, companies using IP-based services are less likely to also use PSTN telephones and ADSL/cable modems.

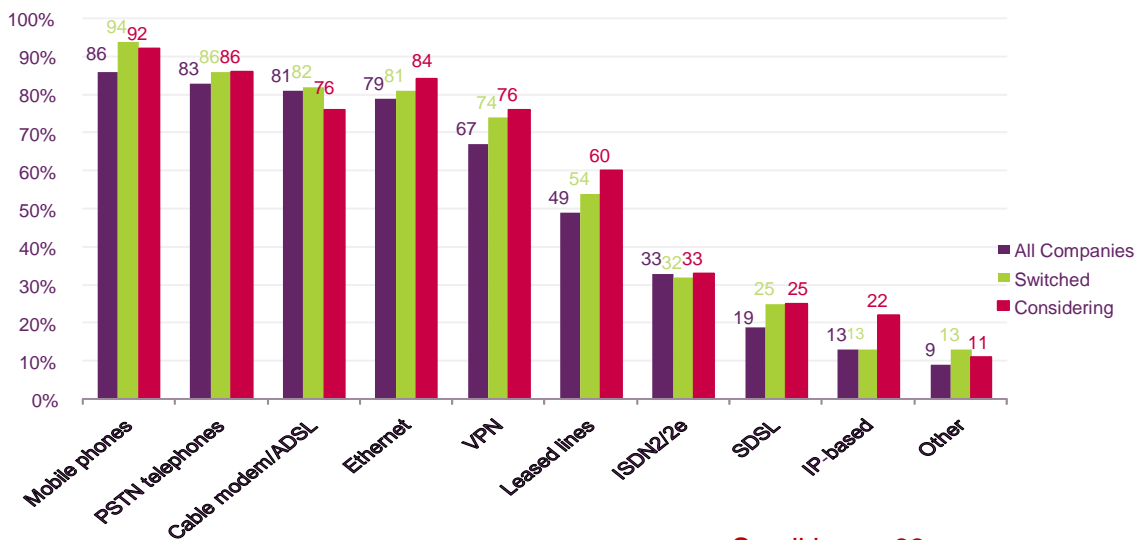
Figure 4.5: Use of other services



Question. Thinking about your current communication provisions which of the following types do you have? Base: All with ISDN30: 475; All with IP-based: 156

Companies who primarily use ISDN30 but are considering switching away from it are more likely to have at least some IP-based services already.

Figure 4.6: Use of other services by switching behaviour¹



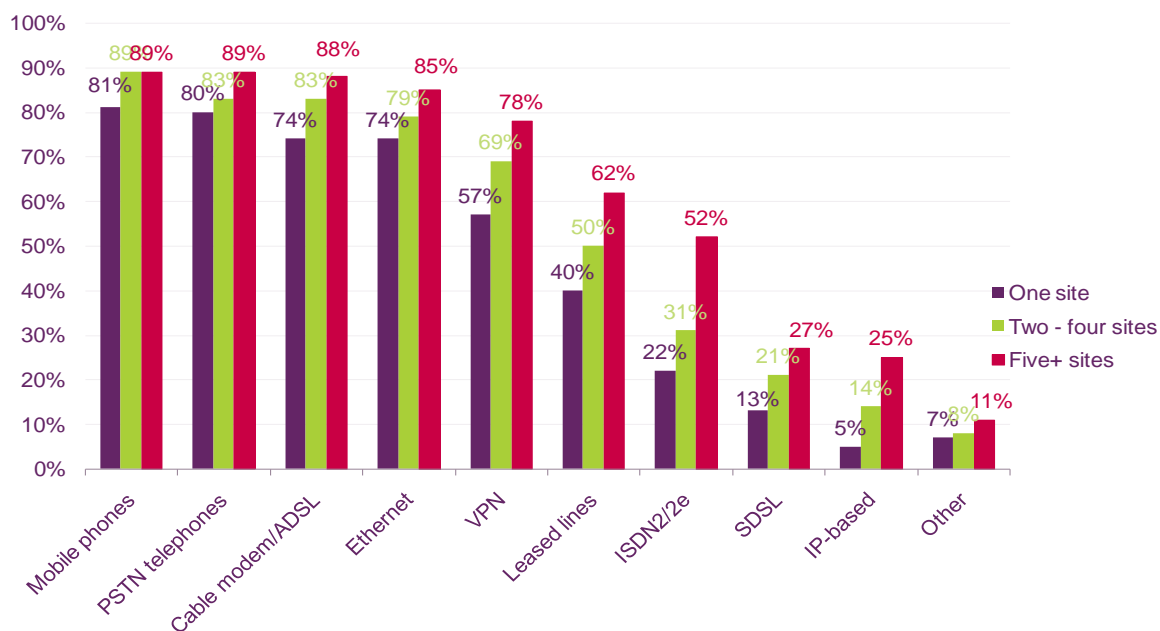
Small base: 63

¹ The numbers above the bars in the Figure are in percent.

Question. Thinking about your current communication provisions which of the following types do you have? Base: All with ISDN30: 475; Have ever switched: 151; Considering switching: 63

Companies with more than one site are more likely to have all services except for PSTN than those with only one site. Companies with two or more sites are more likely to have VPNs, cable modem/ADSL and IP-based services. Those with five more sites are more likely to have leased lines, ISDN2/2e services and IP-based services.

Figure 4.8: Use of other services by number of sites



Question. Thinking about your current communication provisions which of the following types do you have? Base: One site: 176; 2-4 sites: 185; 5+ sites 113)

Companies with switches on-site

90% of ISDN30 companies have a switch (i.e. a PBX or equivalent) compared with 64% of IP-based companies. This may be due to the differing profile in terms of size and complexity of company. Switches are more common in large companies, with high turnover and telecoms spend and a large number of sites. Companies based at a single site who spend less than £24k per annum on telecoms are least likely to have a switch.

62% of all ISDN-based companies, who have a switch, are IP-enabled. This would allow them to connect to IP-based services as well as ISDN30. The profile of companies with IP-enabled switches is similar to that of companies with switches in general. Large companies are more likely to have an IP switch, whereas low revenue, low spend, single site companies are least likely.

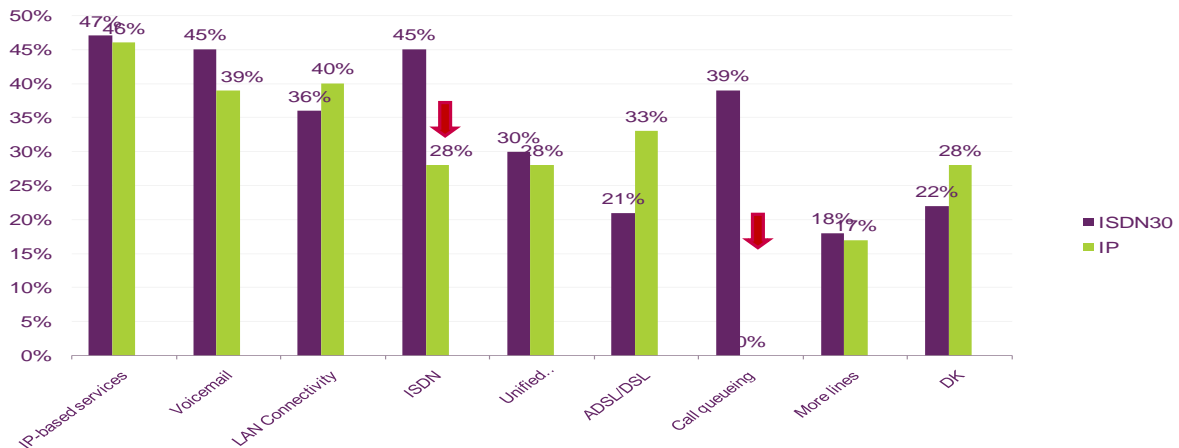
Required switch functionality

Both IP-based and ISDN30 companies with switches were asked what functionality their switches would need to incorporate in the next 12 months. 50% of both groups felt that IP-based functionality would be required in the next twelve months. ISDN functionality was still important to 45% of companies using the service as key compared to only 28% of those using IP-based services. Call queuing was also important to over a third ISDN30 companies but not mentioned at all by those using IP-based services.

Large companies are least likely to require ISDN30 functionality in the next year while companies spending less than £24k on telecoms tend to want ISDN and voice-mail functionality. IP functionality is most frequently mentioned by high telecoms spend (£100k+) and higher revenue (£2.5m+) companies. Companies that are considering switching away from ISDN30 are most likely to want unified communications.

Those companies who use BT are more likely to need ISDN30, IP-based and voicemail functionality than other companies. Those who use alternative providers are more likely to be uncertain about their future needs.

Figure 4.10: Required switch functionality



Question. What functionality will the switches in the organisation need to incorporate over the next 12 months to meet your company needs? Base: ISDN30 company with switch: 425; IP-base with switch: 100

Planned switch replacement (ISDN30 companies only)

45% of companies replace their switch between every five and ten years. Almost a quarter of companies (22%) replace their switch less often than every ten years and 5% replace as events demand. 13% replace their switch less than every five years and 16% do not know how often they replace their switch. The key triggers are moving location (3%) and the need to replace the switch (2%).

15% of companies are intending to replace their switch in the next year. This includes almost a quarter of large companies (23%). A third (34%) of companies who are considering switching away from ISDN30 are also considering replacing the switch.

This is interesting as when asked for the trigger for moving to IP-based services, 23% of respondents to the IP survey mentioned switch replacement was a trigger and 51% a general system upgrade.

Section 5

Role of key service in organisation

This section will look at how ISDN30 and IP-based services are used within the organisation.

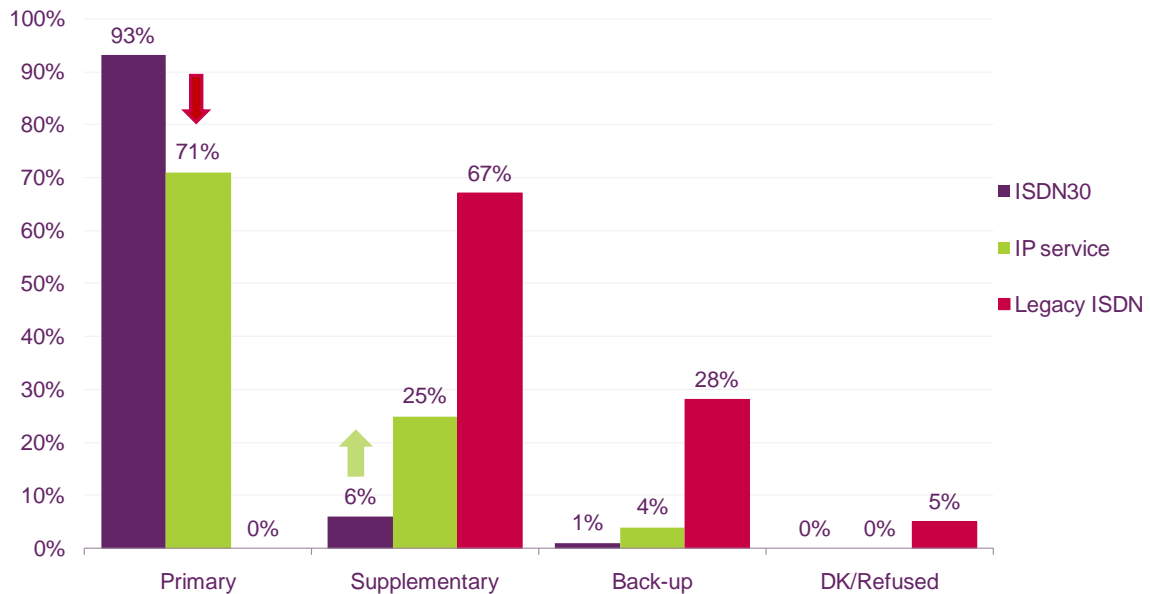
Function of service

For 93% of ISDN30 companies ISDN30 is a primary service, in use for day-to-day business use. This contrasts with IP-based companies where 71% of companies mainly use IP services in a primary role and 29% in a supplementary or support role.

Large companies are more likely to use ISDN30 as a supplementary system as are companies who bundle it with other services. Using ISDN30 as a primary system is more common in companies with only one site. For companies who are considering switching away from ISDN30, ISDN30 is more often a supplementary or back-up service.

Companies who have migrated from ISDN30 were asked if they retain ISDN30 services in any way. 41% of companies (64) retained at least some ISDN30 in their company. This has been placed in a support role, with 43 companies using it as a supplementary service and 18 in a back-up role. This usage is shown in the following chart as legacy ISDN.

Figure 5.1: Function of service in organisation

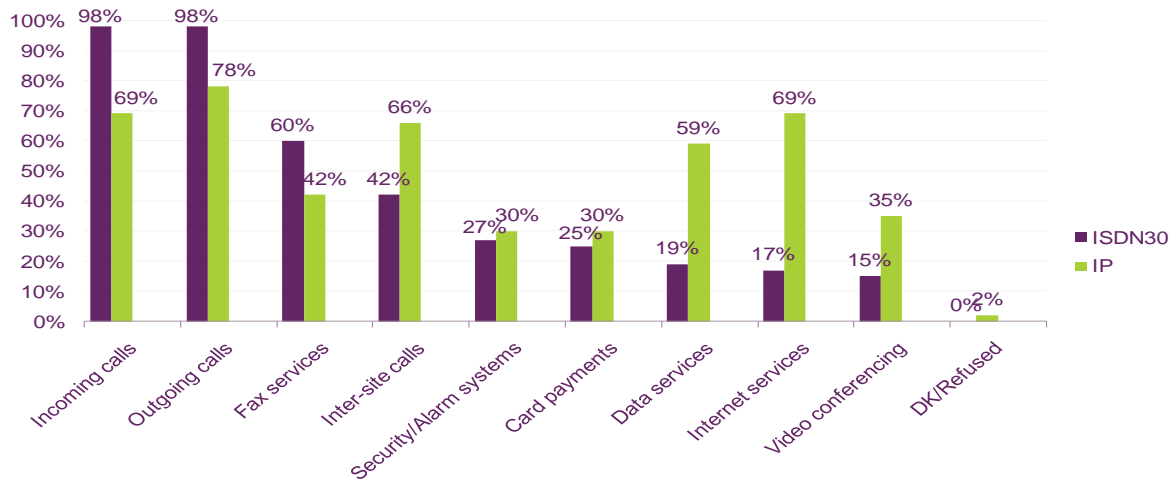


Question: Do you consider ISDN30/IP-based services to be your ...?
 Base: ISDN30 :475; IP-based: 156

Role of key service in organisation

Almost all ISDN30 companies use it for voice services, especially out-going and in-coming calls. Fax services are also common with 60% of companies using ISDN30 for this purpose. IP-based companies tend to use the service for a wider variety of purposes. Particularly important are the use of data and internet services for which IP-based services are used by 59% and 69% of companies respectively. Voice services are also carried over IP-based systems with about 80% of companies using IP-based services in this way.

Figure 5.2: Role of key service in organisation



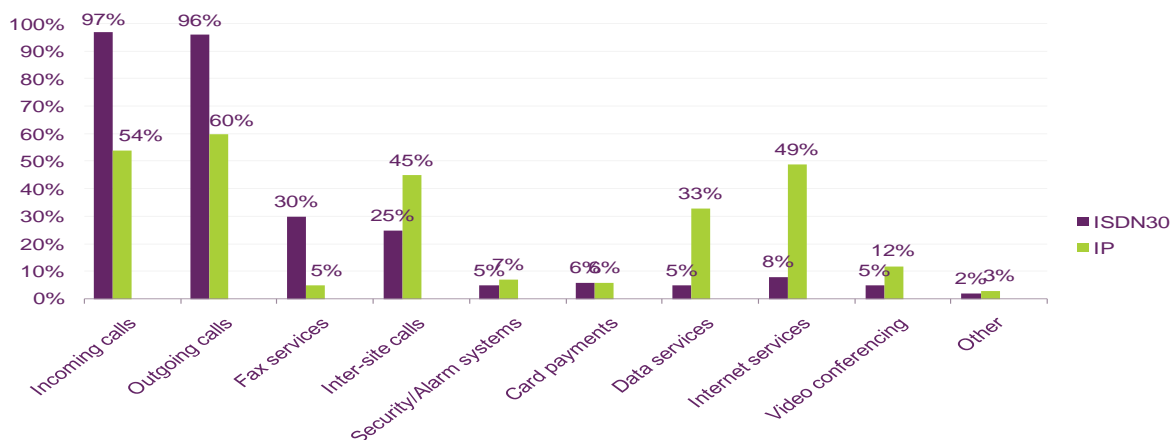
Question: Can you specify whether you use ISDN30/IP-based services for the following business purposes ...?

Base: ISDN30 :475; IP-based: 156

Most important role of key service in organisation

Companies using ISDN30 and IP-based services were asked to rank their three most important uses of the services. Voice services are most important for ISDN30 companies with almost all companies mentioning them in their top three. Data services are of more importance to IP-based companies and these companies are more likely to use IP for a wider range of services than companies using ISDN30.

Figure 5.3: Most Important roles of key service in organisation



Question: And the most important? Base: ISDN30 :475; IP-based: 156

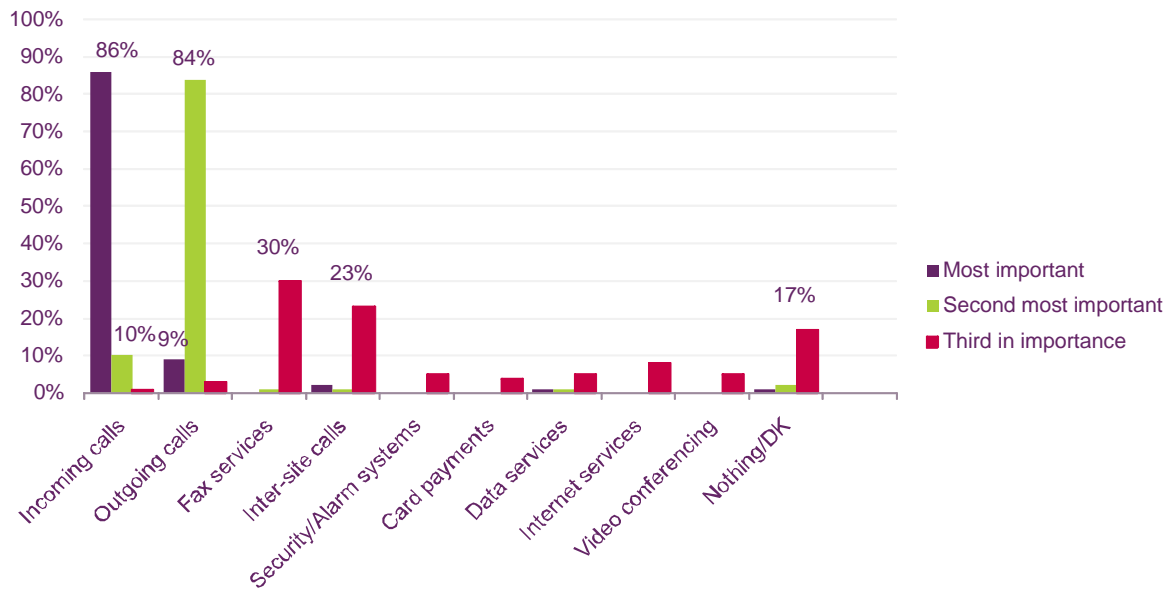
Top three roles of ISDN30 in organisation

86% of ISDN30 companies say the service’s most important role is receiving incoming calls and 84% that making outgoing calls is the second most important use. This rises to 95% for incoming calls and 95% for out-going calls if first and second most important uses are netted. The next two most mentioned services are fax services and inter-site calls. It would seem that ISDN30 is viewed mainly as providing voice access. 17% of companies who use ISDN30 could not think of a third important role for the service in their organisation.

Companies who use ISDN30 as a supplementary service and those who have a low turnover (£2.5m or less) are more likely to say that the important role for ISDN30 in their organisation is for data services rather than voice.

Companies with multiple sites are more likely to say that making inter-site calls is one of the three most important uses. Video-conferencing is more important for large companies and those with more than 5 sites.

Figure 5.4: Top three roles of ISDN30



Question: And the most important? Base: ISDN30 :475

Top three roles of IP-based services in organisation

There is a more mixed picture for the most important role of IP-based services in an organisation than with ISDN30. Although in-coming and out-going calls are important and mentioned by about 45% of companies, a wider variety of services feature in the top three roles. Compared to ISDN30 which is mainly used for voice services, IP-based services are used for both voice and data services.

The top three services which are classed as most important are incoming calls (32%), inter-site calls (19%) and internet services (17%). Outgoing calls (33%), internet services (17%) and incoming calls (14%) are the three highest ranked among mentions of the second most important function. These three services are also the top three mentioned services when companies give their third most important service. Data services are also important and are mentioned as being one of IP-based services’ top three most important roles by 33% of companies.

Section 6

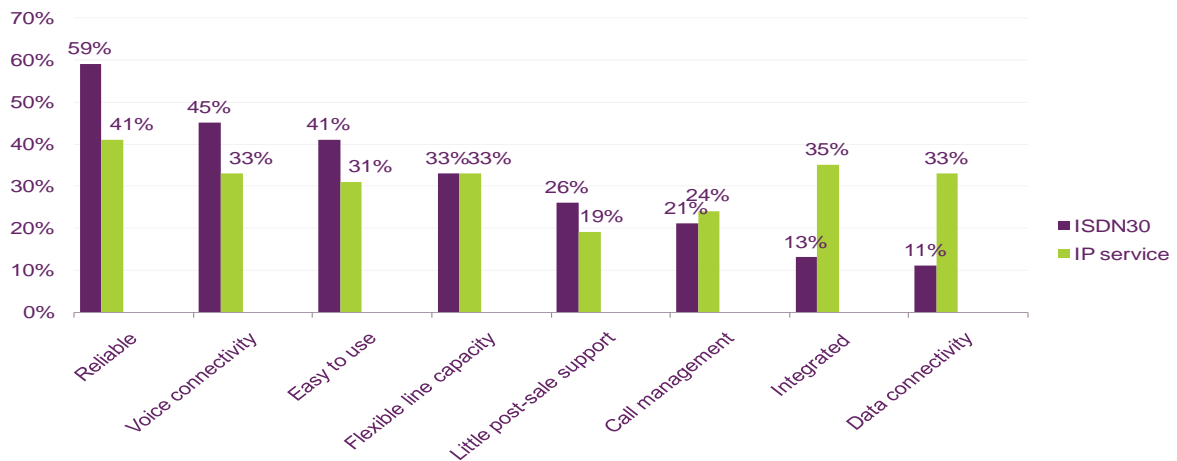
Functional value of key service in organisation

This section will look at what characteristics of ISDN30 and IP-based services are valued by the organisations that use them.

Functional value of key service

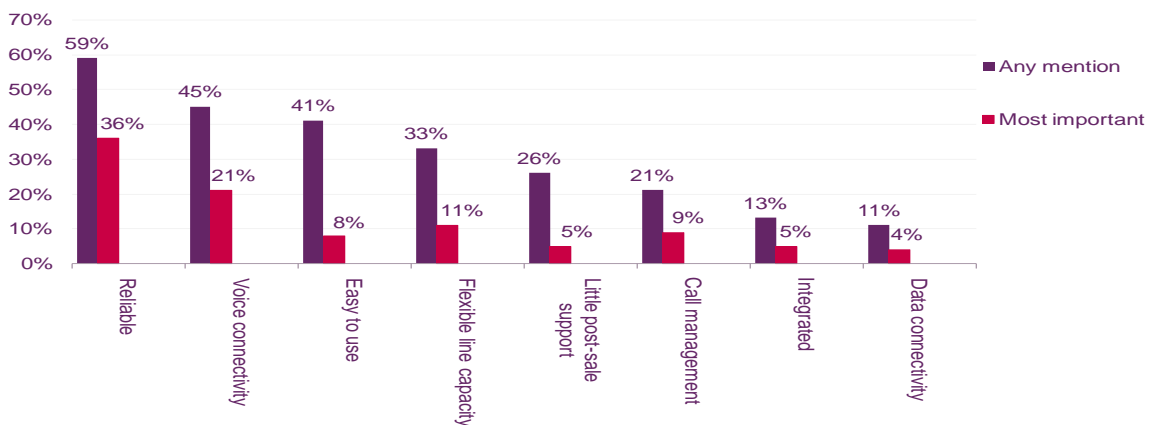
The most mentioned functional value by ISDN30-based companies is reliability which is mentioned by 59% and rated as most important by 37%. Companies with IP-based services are more likely to value their service’s data connectivity and integrated voice and data functionality.

Figure 6.1: Functional value of ISDN30 and IP-based services



Overall, what do you regard as the main functional value of ISDN30/IP-based services?
 Base: ISDN30: 475; IP-based services :156

Figure 6.2: Functional value of ISDN30: Any and most important



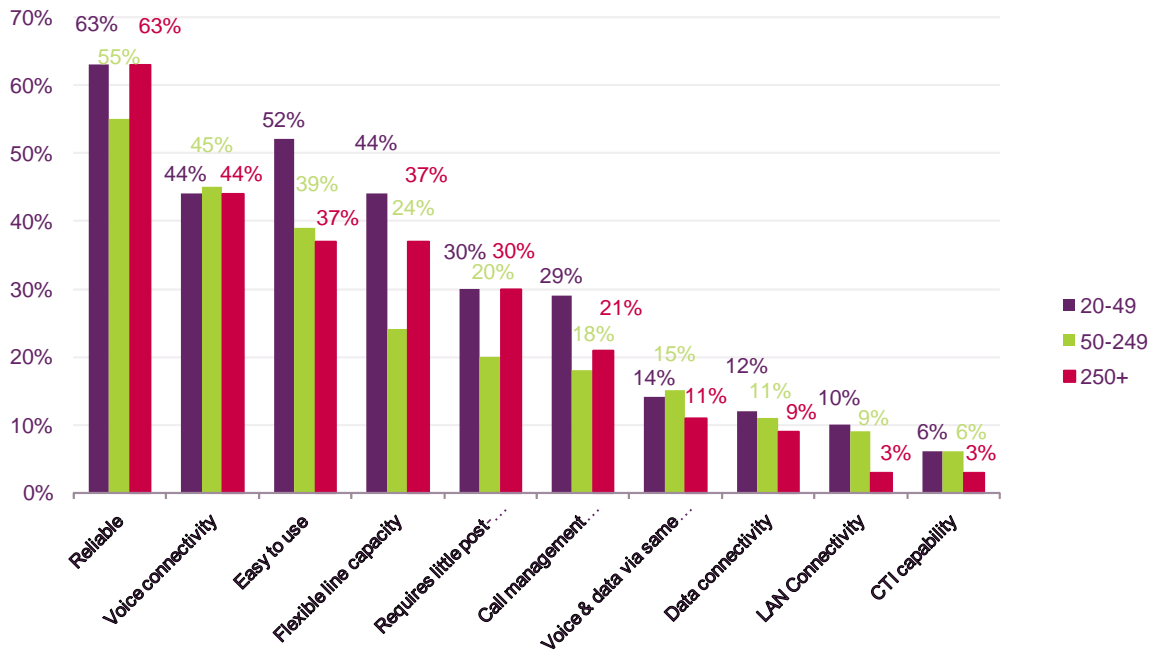
Overall, what do you regard as the main/most important functional value of ISDN30/IP-based services? (ISDN30: 475)

Any: Multi-code question; Most important: single code

Comparing ISDN30 companies by size and other demographics, reliability is the most commonly mentioned value for all groups. However, small companies tend to put more value on ISDN30's ease of its use and are more likely than medium sized companies to value its call management functionality and flexible capacity. Medium-sized companies are less likely to value ISDN30's flexible line capacity and the fact it requires little post-purchase support than other companies.

Companies with smaller revenues (under £2.5m) value ISDN30 for its integrated voice and data functionality as well as data connectivity.

Figure 6.3: Functional value of ISDN30: Company Size



Overall, what do you regard as the main/most important functional value of ISDN30/IP-based services? (Small: 115; Medium: 210; Large: 150)

Section 7

ISDN30: Switching behaviour and intention

This section will look at whether ISDN30 companies have ever switched ISDN30 supplier, are considering switching to IP services, reasons for switching and awareness and views on IP-based services as an alternative.

Past switching behaviour

16% of companies have switched ISDN30 supplier in the last year and 32% have ever changed their supplier. Those companies who have switched in the last year have tended to move to an alternative supplier and have no part of their service with BT. Those companies who use ISDN30 as a primary service are more likely to have switched at some time than those who use it as a secondary service.

When asked why they had switched suppliers, 72% of respondents who had switched said that it was because they had been offered a better deal by their new supplier. 15% had switched to receive a better quality of service and 13% a better range of services. For 7%, it was reaching the end of their contract that encouraged them to switch.

Intention to switch away from ISDN30

Most companies (84%) are not currently considering replacing ISDN30 services. The 13% of companies who are considering switching tend to be large. 9 out of the 31 companies who use ISDN30 as a secondary service are considering moving away from the service.

When asked why they are planning to continue using ISDN30, 46% of these companies mentioned its reliability and 40% that it met their current needs. Large companies and those who purchase ISDN30 as part of a package were more likely to say the service meets their needs. Companies who use BT as their only supplier were more likely to stay because of the service reliability.

14% of companies believed that it would be too much hassle to switch. These companies tended to spend less than £24k on telecoms. 12% of companies, especially large ones, feel that the costs of alternatives are too high and 5% cannot move away as they are tied into long-term contracts. Companies using a mixture of suppliers and those who had previously switched were more concerned about high internal costs, resulting from switching, than others (6% of all companies).

Benefits and concerns about switching away from ISDN30

The 63 companies who are considering moving away from ISDN30 were asked what they perceived to be the benefits of the move and if they had any concerns. Around two thirds (63%) believed alternatives would be cheaper and 41% that they would get better value for money. Better service features were also important with 19% mentioning scalability, 17% integration of services, 11% more LAN connectivity and 19% better service features in general. 13% felt that a replacement service would be more reliable and 5% that it would enable them to port numbers in future.

About two thirds (62%) of the 63 companies had no concerns about moving away from ISDN30. Of the remaining companies, 17 had concerns about loss of reliability and 5 had other concerns.

Impact of price on decision to move away from ISDN30

All companies were asked whether a 10% fall in the price of ISDN30, from all suppliers, would influence their decision to switch. 17% of respondents could not answer this question and a few refused as they were not considering replacing ISDN30 at all.

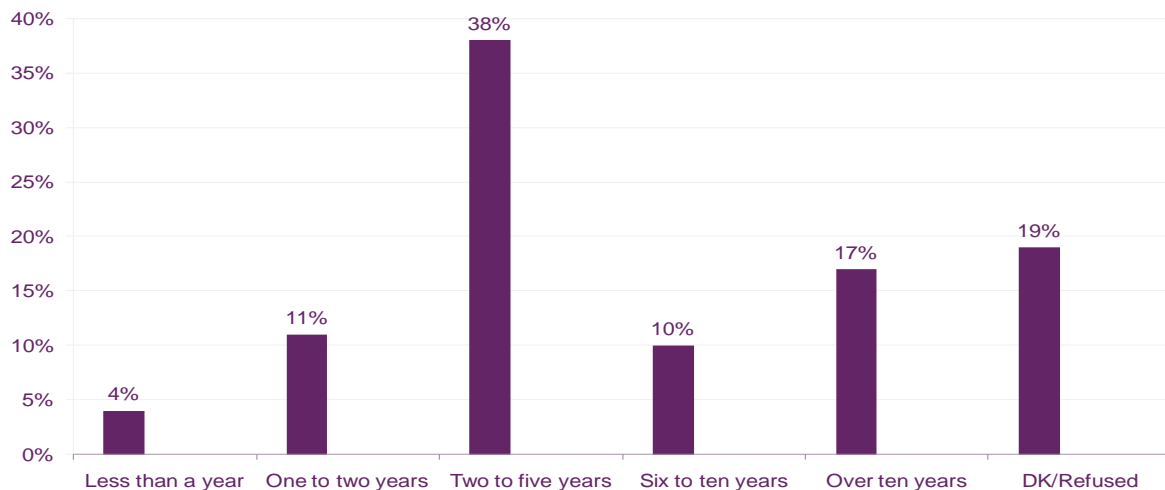
Across all companies, 33% of respondents, excluding those who could not answer, did not believe it would affect their decision to switch. Of companies who were considering switching, 14% felt it would not affect their choice and 41% that it would be a consideration but have limited impact. Similarly, it would be a factor for 33% of those considering switching but only 23% of the wider population. 21% of companies would definitely stay with ISDN30 but only 12% of those considering switching.

Considering that 64% of companies who are considering switching believe lower costs will be a benefit, it seems clear that a fall in the cost of ISDN30 will lead some of these companies to reconsider. But as 54% of potential switchers and 56% of companies as a whole feel the price change in itself would have little impact, there are wider factors that trigger switching away from ISDN30.

Retention of ISDN30 services

As mentioned above, 84% of companies are not currently planning to move away from ISDN30 services. 15% of companies intend to move away from ISDN30 in the next two years and these companies tend to be the ones who are already considering replacing ISDN30. Otherwise, the average time, across all companies, for retention of ISDN30, is five to six years. A sixth of companies do not intend to cease using ISDN30 in the next ten years.

Figure 7.1: Retention of ISDN30 services



How long do you envisage continuing to use ISDN30 services for? (ISDN30:475)

Replacement of ISDN30 services

All companies were asked what they would do once they no longer use ISDN30. This question was asked in two ways: firstly as a prompted question and then spontaneously asking what the best alternative to ISDN30 is.

In the prompted question, 39% of respondents had not thought about replacing their ISDN30 service. Large companies were less likely (26%) to be in this situation compared to small-medium sized companies (46%). 18% of all companies did not know how to answer the question or refused to.

A small number (6%) said they would not replace ISDN30 when they stopped using it. For the remaining companies, IP-based services were mentioned by the majority of companies. In particular, hosted VOIP was the most popular being mentioned by 24% of companies followed by SIP trunking at 16% and IP Centrex at 7%.

SIP trunking is more popular as a replacement with large companies and those with more complicated telecoms needs. It is also more popular with companies who use an alternative supplier to BT. Companies who spend more than £100k per annum on telecoms were more willing to consider alternatives such as IP Centrex, ethernet and leased lines.

Companies who are considering switching were more likely to mention an IP-based solution than other companies.

It was a similar situation when respondents were asked if they had to replace ISDN30, what the best replacement would be. 54% of companies did not feel able or refused to answer this question. Of those with a valid response, 25% said that they would not replace ISDN30, 67% that they would replace it with an IP-based service and 7% another response.

Of the 148 companies who mentioned an IP-based service as the best replacement for ISDN30, 86 (58%) mentioned VOIP services, of which 18 companies specifically mentioned hosted VOIP. SIP trunking was the second most mentioned IP-based service and was mentioned by 42 companies (28%). IP Centrex was only mentioned by 2 companies and 18 companies mentioned a non-specific form of IP,

Awareness of IP-based services

As the responses to the questions about replacements for ISDN30 make clear, many companies are aware of IP-based services. 86% of all companies who mainly use ISDN30 are aware of IP-based services.

Of these 408 companies, 21% are planning to migrate their ISDN30 to IP-based services in the next 12 to 24 months. 72% have no plans in this area and 7% are unsure.

Trialling of IP-based services

IT companies have been offering trials on IP-based services to some companies. Within our sample, 70% of ISDN30 companies who were aware of IP-based services have not been part of a trial. However, 113 companies have either trialled or are planning to trial IP-based services.

Of the 113 companies, 24 companies are currently trialling and 18 will be trialling in the near future. 71 companies have trialled these services already with 27 deciding to implement and 44 deciding the service was not for them. Of the 91 companies who have trialled IP-based services and made decisions, 56% have decided it was not for them and 44% decided to proceed with implementing this service.

Large companies are more likely to have trialled and be planning to implement IP-based services. 24% of those companies, who are considering switching, have both trialled and plan to implement or are about to trial IP-based services. Companies with two to four sites are more likely to have trialled IP-based services and decided not to proceed.

When asked about their concerns about IP-based services, 38% of the 113 companies with experience of it mentioned quality of service issues and 37% reliability. Finance was also an issue with 19% mentioning price and 12% the additional investment required. It would not meet the business needs of 8% of companies and 12% were happy with their current system. 13% had no concerns about moving to IP-based services and 11% felt they did not yet know enough about it.

Section 8

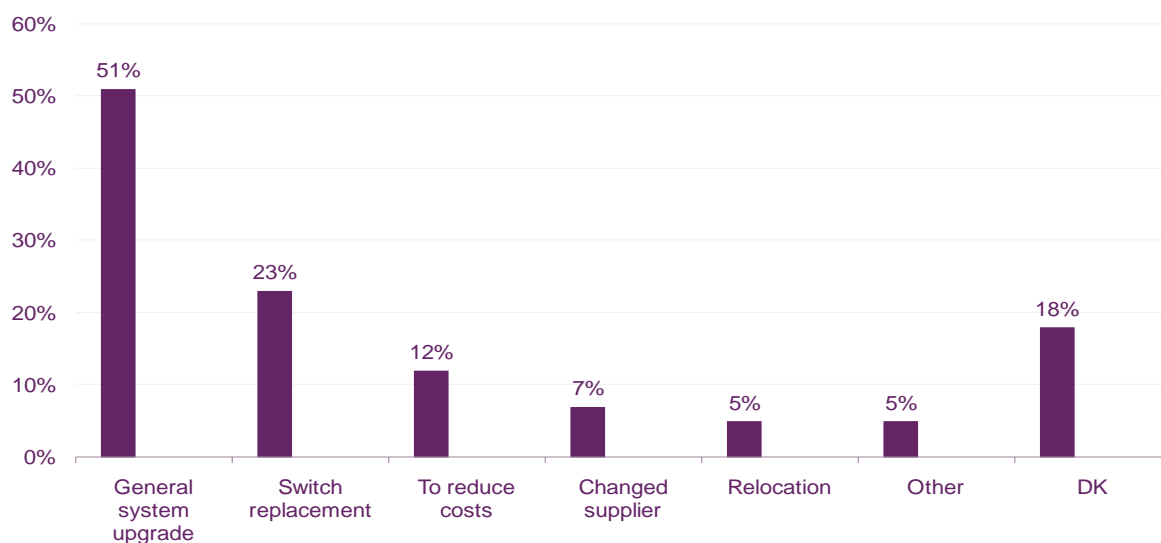
IP-based services: Experience of migrating from ISDN30 to IP-based services

This section will look at the experience IP-based companies had migrating from ISDN30.

Trigger for migration

In general, the main triggers for switching from ISDN30 to IP services are event-driven with 51% of companies saying that a general upgrade and 23% a switch replacement triggered the change. The key non-event trigger is the need to reduce costs and companies mentioning this tend to be large. For high telecoms spend companies, the event to trigger the change was more likely to be a switch replacement while for other companies, it was a general upgrade. Companies who use a mix of suppliers were more likely to say the trigger was switch replacement (53%) or when they changed supplier (20%).

Figure 8.1: Trigger for moving away from ISDN30



Have any of these previously acted as a trigger for moving from ISDN30 to IP-based services? (IP: 156)

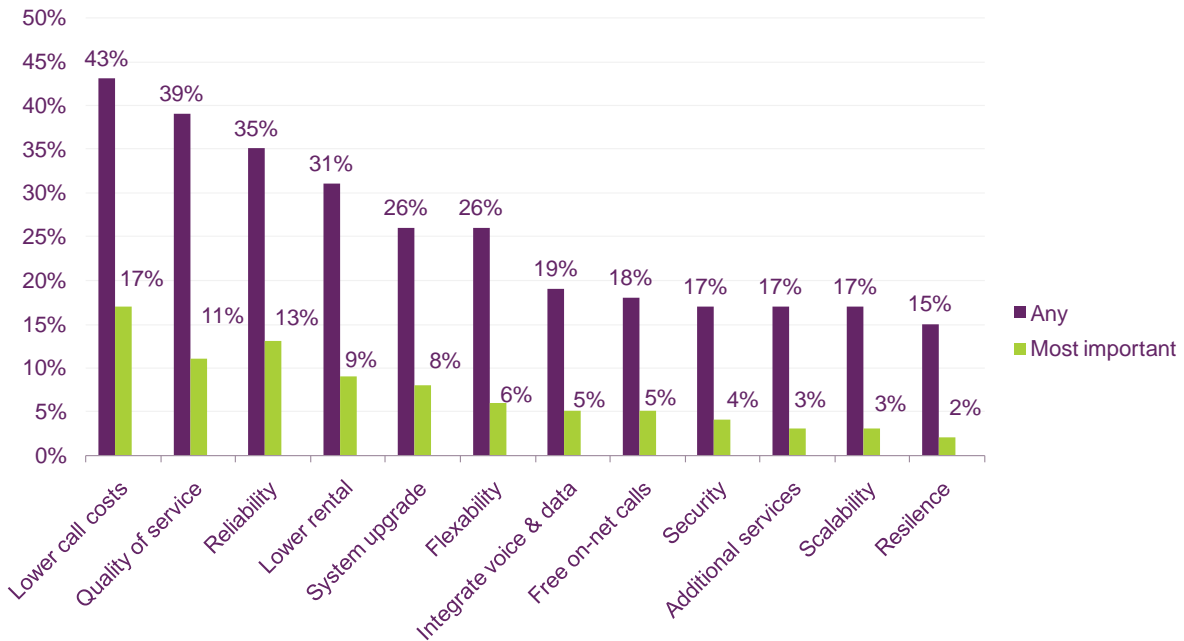
Reasons for implementing IP-based services

The main reasons for implementing IP-based services related to lower costs, quality of service and increased reliability. A system upgrade and need for increased flexibility were also mentioned by over a quarter of companies for each.

Large companies are more likely to mention security (24%), resilience (21%) and to maximise existing PBX investment (16%). Companies with a high spend on telecoms implemented IP-based services for reliability (50%), lower rental costs (44%), better resilience (36%) and security (30%) or as part of an upgrade (14%).

Companies who do not use BT for IP-based services are less likely to mention that quality of service (29%) was a reason while they are more likely to say it was implemented as part of a system upgrade (32%). Companies using a mix of suppliers were more likely to implement IP for reasons of reliability (53%) and security (33%). Those who do not use IP-based services as a primary service were more likely to implement it to maximise existing PBX investment.

Figure 8.2: Reasons for implementing IP-based services



What were your reasons for choosing to implement IP-based services? (IP: 156)

Cost of implementing IP-based services

The majority of companies (75%) required investment in new equipment when they moved to IP-based services. Almost a third of those who did (32%) did not know what they spent or refused to answer. 28% of companies spent less than £20k, 24% £20-100k and 15% over £100k.

The average spend, for all with a valid answer, is £375k and the median spend £35k. Large companies who could answer this question spent, on average, over £750k on equipment while small-medium sized companies spent under £50k. 50% of companies spent less than £35k while 4% of companies spent more than £0.25m.

Only 69 companies were able to give both an annual spend on telecoms and estimate how much it cost to move to IP-based services. Of the 21 companies spending less than £24k per annum on telecoms, 15 spent less than £10k on moving to IP-based services. 19 companies spent between £24k and £99k on telecoms per annum and of these, moving to IP cost them between £10k and £100k. For the 29 high-spend (£100k+), 13 spent £10k to £100k and a further 13 more than £100k.

(NB: Median spend: the amount spent by the middle company if ordered by size of spend.)

Savings from implementing IP-based services

70% of companies believe they saved money on their regular bills by implementing IP-based services. 12% did not believe this was the case and 18% did not know.

Of the companies who believe they have saved money, 43% could not or would not say how much they had saved. 16% saved less than £5k per annum. The average money saved was approximately £200k per year but the median money saved was £15k per year. This shows that 50% of companies saved less than £15k a year while 5% of companies saved more than £100k per year.

Only 57 companies could estimate how much IP-based services had saved them in a year and what they spent on telecoms in a year. All the 21 companies who spent less than £100k per annum saved £10k or less. For the 32 companies who spent more than £100k on telecoms per year, 18 saved between £10k and £99k and 9 over £100k.

Annex 1

Questionnaire

	Prodata Partners Ltd
---	----------------------

ISDN30 Research November - December 2009

Quantitative Questionnaire

	RESPONDENT DETAILS
Respondent Name	
Position	
Department	
Organisation	
Telephone No.	
Email and/or postal address	

ISDN 30 Questionnaire*A) TARGETS & INTERVIEWER NOTES*

The purpose of the interview is to:-

- Assess the reasons why respondents' businesses are using ISDN30;
- Gauge the length of time for which they are likely to continue using ISDN30;
- Explore whether IP technologies are regarded as a valid substitute or migration path for ISDN30 by respondents' businesses.

ISDN30 is the standard digital telephone line service used by larger businesses most commonly for telephone calls, but also for data and video services. ISDN30 provides up to 30 channels (lines) each capable of supporting a separate voice or data call. ISDN30 lines are typically connected directly to a business telephone system (PBX).

IP technology, in the context of this research, consists of services based on internet protocol technology (IP) that are being used as a replacement for ISDN30 services. This includes Voice over IP (VOIP) telephony services including SIP Trunking solutions and Centrex services provided by IP networks (so called 'hosted VOIP' solutions).

The following target quotas apply to the total 650 interviews to be conducted:-

Employee Size Band	Interviews Required
Small business (20-49 employees)	<ul style="list-style-type: none"> • 100 x ISDN30 Users • 45-50 IP Migrators
Medium business (50-250 employees)	<ul style="list-style-type: none"> • 200 x ISDN30 Users • 80-85 IP Migrators
Large business (250+ employees)	<ul style="list-style-type: none"> • 150 x ISDN30 Users • 70-75 IP Migrators
Total	<ul style="list-style-type: none"> • 450 x ISDN30 Users • 200 IP Migrators

	• Total 650
--	--------------------

Target individuals to be researched should be responsible for decision-making and purchasing of telecommunications services for their organisation.

Target respondent job titles may include:-

- Telecommunications Director/Manager;
- Networks Director/Manager;
- ICT (IT & Telecommunications) Director/Manager.

B) RECRUITMENT SCRIPT

Good morning /afternoon, I am calling from Prodata Partners Limited on behalf of Ofcom. We'd like to invite you to take part in an important national survey on ISDN30 business communications services. Your feedback on this topic would help Ofcom's decisions in this area. Would you be willing to take part in this survey?

INTERVIEWER NOTE: IF RESPONDENT'S ORGANISATION IS NO LONGER USING ISDN30 BUT PREVIOUSLY DID USE ISDN30 AND HAS NOW MIGRATED TO IP INSTEAD, THIS IS STILL A VALID PROFILE FOR THIS RESEARCH, SO CONTINUE WITH INTERVIEW.

IF RESPONDENT AGREES, CONTINUE WITH INTERVIEW. IF RESPONDENT DECLINES, ASK TO BE REFERRED TO AN ALTERNATIVE CONTACT IN THE ORGANISATION, AND RESTART INTERVIEW WITH THAT RESPONDENT.

Thank you for agreeing to participate in this research. Assuming your business meets the Ofcom criteria for inclusion, the survey should take around 20 minutes to complete.

SAY IF FURTHER ASSURANCE REQUIRED: This is a genuine market research study about business connectivity on behalf of Ofcom and no sales call will result from our contact to you. The answers you give will be held in strictest confidence; they will be added to those from several hundred others and presented to our client as statistical summaries only.

The interview will be carried out in strict accordance with the Market Research Society's Code of Conduct, and as part of the quality control processes some interviews may be verified.

ISDN 30 Questionnaire

1) SCREENER QUESTIONS

ASK ALL

QS1 Thinking about your company’s current telecoms provisions, which of the following types of business communication service does your company have?
MULTICODE

Regular PSTN telephone line(s)	1
Mobile phones (including blackberry handsets).....	2
Cable modem or ADSL	3
ISDN 2/2e channels or Business Highway.....	4
ISDN 30 channels	5
IP based alternatives to ISDN (e.g. SIP trunks, hosted VOIP)	6
SDSL	7
Leased lines	8
Virtual private networks.....	9
Ethernet	10
Other business communications services.....	11
None of these	96
DK	97
Refused.....	99

COMPANY MUST HAVE CODE 5 or 6 – IF NOT, CLOSE and THANK

QS2 Approximately how many employees does your company/organisation have at all sites in the UK?
INTERVIEWER: EXCLUDING ANY PARENT HOLDING COMPANY OR OTHER INDIVIDUAL COMPANIES WITHIN GROUP.
SINGLE CODE

Less than 20.....	1
20-49	2
50-249	3
250 or more.....	4
DK	97
Refused.....	99

COMPANY/ORGANISATION MUST HAVE CODE 2, 3 or 4 – IF NOT, CLOSE and THANK

QS3 Are you responsible for decision-making on business communications services at some or all of the sites your business has?
SINGLE CODE

Yes – solely responsible for all sites	1
Yes – jointly responsible for all sites	2
Yes – solely/jointly responsible for some sites, but not all	3
Not – not solely/jointly responsible for any sites	4
DK	97
Refused.....	99

COMPANY/ORGANISATION MUST HAVE CODE 1, 2 or 3 – IF NOT, CLOSE and THANK

Thank you. You have now qualified for this survey. Are you happy for me to talk about your business communications at this time? If not, what day/time is convenient for me to call back? I will phone you back on _____.

2) MAIN QUESTIONNAIRE

A) Business Demographics

I'd now like to ask you a few more background questions about your company before going on to talk more about your business communications services.

QA1 To the best of your knowledge what would you say is the annual UK turnover for your company?
DO NOT INCLUDE OVERSEAS TURNOVER IF ASKED
SINGLE CODE

Less than £250, 000.....	1
£250, 000 - £499, 999	2
£500, 000 - £999, 999	3
£1 Million - £2.5 Million.....	4
£2.5 Million - £20 Million.....	5
£21 Million - £50 Million.....	6
£51 Million-£100 Million.....	7
£101 Million - £500 Million	8
Over £500 Million	9
DK	97
Refused.....	99

QA2 Approximately how much does your organisation spend annually on business communications services within the UK across all sites?
PROMPT WITH BANDS IF NECESSARY, ESTIMATE OKAY IF NOT SURE, DO NOT INCLUDE OVERSEAS SPEND IF ASKED.
SINGLE CODE

Less than £5k.....	1
£5-£9k	2
£10-£24k	3
£25-£49k	4
£50-£99k	5
£100-£249k	6
£250-£499k	7
£500-£999k	8
£1 million-£4 million.....	9
£5 million-£9 million.....	10
£10 million-£24 million.....	11
£25 million or more.....	12
DK	97
Refused.....	99

QA3 And how many individual sites, outlets, branches and/or offices, including the one where you work, does your company/organisation have in the UK? Please do not include teleworking sites/homeworkers.

INTERVIEWER: EXCLUDING ANY PARENT HOLDING COMPANY OR OTHER INDIVIDUAL COMPANIES WITHIN THE GROUP. PROMPT WITH BANDS IF NECESSARY SINGLE CODE

1	1
2	2
3-4	3
5-9	4
10-14	5
15-19	6
20-49	7
50-99	8
100-499	9
500 or more	10
DK	97
Refused	99

B) Current Business Communications Services

I'd now like to ask you some questions about your business communications services. I will start with some general questions.

GenQB1 You have said that you use both ISDN30 and IP-based alternatives to ISDN How would you describe the mix of your business communications functionality between these two types of services?

ALL RESPONDENTS MUST BE SINGLE CODED AT THIS POINT FOR ONWARD ROUTING TO ISDN30 OR IP SECTION.

IF RESPONDENT IS UNSURE, PROBE AS TO WHETHER VOICE CALLS AND DATA TRAFFIC ARE STILL MOSTLY ON ISDN30 OR HAVE NOW MIGRATED TO 2/3RDS OR MORE IP AND ROUTE ACCORDINGLY.

DO NOT ALLOW DK/REFUSED.

SINGLE CODE

Mostly i.e. 2/3rds or more still on ISDN30	1	GO TO ISDN30QB1
Mostly i.e. 2/3rds or more migrated to IP	2	GO TO IPQB1

i) ISDN30 Respondents

ISDN30QB1 How many ISDN channels are in use across your organisation in the UK?

INTERVIEWER NOTE: IF RESPONDENT REQUIRES HELP, EXPLAIN THAT 1 ISDN30 SUBSCRIPTION = 30 CHANNELS, SO FOR EVERY SUBSCRIPTION TO ISDN30 THIS COUNTS AS 30 CHANNELS. 2 SUBSCRIPTIONS TO ISDN30 WILL THEREFORE COUNT AS 60 CHANNELS ETC.

SINGLE CODE

30 channels (1 ISDN30 subscription)	1
60 channels (2 ISDN30 subscriptions).....	2
90-120 channels (3-4 ISDN30 subscriptions)	3
150-270 channels (5-9 ISDN30 subscriptions)	4
300-420 channels (10-14 ISDN30 subscriptions)	5
450-570 channels (15-19 ISDN30 subscriptions)	6
600-1470 channels (20-49 ISDN30 subscriptions)	7
1500 or more channels (50 or more ISDN30 subscriptions).....	8
DK	97
Refused	99

ISDN30QB2 Can you specify whether you use ISDN30 for the following business uses?

READ OUT LIST
MULTICODE

Incoming calls.....	1
Outgoing calls.....	2
Calls between different sites	3
Internet services	4
Fax services	5
Security/alarm systems	6
Data services.....	7
Card payments	8
Video conferencing.....	9
Other (specify).....	10
DK.....	97
Refused	99

ISDN30QB3 You have said that you use ISDN30 for the following purposes. Could you rank the top three most important functions for which your company uses ISDN30?

SINGLE CODE a,b,c – UP TO 3 ANSWERS ONLY

	First (a)	Second (b)	Third (c)
Incoming calls.....	1	1	1
Outgoing calls.....	2	2	2
Calls between different sites	3	3	3
Internet services	4	4	4
Fax services	5	5	5
Security/alarm systems	6	6	6
Data services.....	7	7	7
Card payments	8	8	8
Video conferencing.....	9	9	9
Other (specify).....	10	10	10
DK.....	97	97	97
Refused	99	99	99

ISDN30QB4 Does your company have a switch i.e. PBX or PABX?

SINGLE CODE

Yes	1 GO TO ISDN30QB5
No	2 GO TO ISDN30QB9
DK	97 GO TO ISDN30QB9
Refused	99 GO TO ISDN30QB9

ISDN30QB5 How often do you replace your switch(es)?

SINGLE CODE

Less than every two years	1
Every two to five years	2
Five to ten years	3
More than ten years	4
When we change location or office	5
When it needs replacing (Prompt for Time)	6
DK (DO NOT READ OUT)	97
Refused (DO NOT READ OUT)	99

ISDN30QB6 Are you planning to replace your switch(es) in the next twelve months?
SINGLE CODE

Yes	1
No	2
DK	97
Refused	99

ISDN30QB7 Is your switch IP-enabled (i.e. can it be connected to IP based telephone services instead of ISDN30)?
SINGLE CODE

Yes	1
No	2
DK	97
Refused	99

ISDN30QB8 What functionality will the switch(es) in your organisation need to incorporate over the next 12 months to meet your company's business communication needs?

READ OUT PROMPTS IF RESPONDENT NEEDS PROMPTING
MULTICODE

ISDN	1
IP-based networking	2
Voicemail	3
LAN connectivity	4
ADSL/DSL/ Broadband	5
Call queuing and routing	6
Unified communications e.g. with mobiles	7
More lines	8
Other (specify) _____	9
DK	97
Refused	99

ISDN30QB9 Which supplier(s) do you use for ISDN30?
READ OUT LIST IF REQUIRED BY RESPONDENT
MULTICODE

BT	1
Cable & Wireless (incl. former Energis & thus)	2
Colt Communications	3
Daisy Communications	4
KCOM (incl. Kingston Communications & Affiniti)	5
Virgin Media (incl. NTL:Telewest)	6
Opal Communications	7
Unicom	8
XLN	9
AT&T	10
MCI	11
Global Crossing	12
Other (specify)	13
DK	97
Refused	99

ISDN30QB10 Approximately how much does your organisation spend annually, across all UK sites, on ISDN30 services?

SINGLE CODE

Under £1,000	1
£1,000 to £2,499	2
£2,500 to £4,999	3
£5,000 to £9,999	4
£10,000 to £19,999	5
£20,000 to £49,999	6
£50,000 to £99,999	7
£100,000 to £249,999	8
£250,000 to £499,999	9
£500,000 to £999,999	10
£1,000,000 to £4,999,999	11
£5,000,000 to £9,999,999	12
£10,000,000 or more	13
DK	97
Refused	99

ISDN30QB11 Approximately how long have you been using ISDN30 services?

SINGLE CODE

Less than six months	1
Six month to twelve months	2
Twelve months to eighteen months	3
Eighteen months to Twenty-Four months	4
Two to Five years	5
Six to Ten years	6
Ten to Fifteen years	7
Sixteen to Twenty Years	8
Over Twenty Years	9
DK	97
Refused	99

ISDN30QB12 Do you consider ISDN30 to be:

SINGLE CODE

Your primary service	1
A supplementary service used in addition to your main service	2
A back-up system in case your main systems fail	3
Other (specify)	4
DK	97
Refused	99

GO TO QC1

ii) IP Respondents

IPQB1 You have said that your mix of business communications functionality is mostly now on IP-based services. What type of IP services do you use?

MULTICODE

SIP trunking.....	1
Hosted VOIP.....	2
IP Centrex	3
Other (specify)	4
DK	97
Refused	99

IPQB2 Can you specify whether you use IP-based services for the following business uses?

READ OUT LIST

MULTICODE

Incoming calls.....	1
Outgoing calls.....	2
Calls between different sites	3
Internet services	4
Fax services	5
Security/alarm systems	6
Data services.....	7
Card payments	8
Video conferencing.....	9
Other (specify).....	10
DK.....	97
Refused	99

IPQB3 You have said that you use IP-based services for the following purposes. Could you rank the top three most important functions for which your company uses IP-based services?

SINGLE CODE a,b,c – UP TO 3 ANSWERS ONLY

.....	First (a)	Second (b)	Third (c)
Incoming calls.....	1	1	1
Outgoing calls.....	2	2	2
Calls between different sites	3	3	3
Internet services	4	4	4
Fax services	5	5	5
Security/alarm systems	6	6	6
Data services.....	7	7	7
Card payments	8	8	8
Video conferencing.....	9	9	9
Other (specify).....	10	10.....	10
DK.....	97	97.....	97
Refused	90	99.....	99

IPQB4 Does your company have a switch i.e. PBX or PABX?

SINGLE CODE

Yes	1
No	2
DK	97
Refused	99

IPQB5 Have any of the following previously acted as a trigger for moving from ISDN30 to IP-based services for your organisation?

MULTICODE

Switch replacement	1
Part of general upgrade	2
Changed supplier	3
Other trigger (please specify)	4
DK	97
Refused	99

IPQB6 What functionality will the switch(es) in your organisation need to incorporate over the next 12 months to meet your company's business communication needs?

READ OUT PROMPTS IF RESPONDENT NEEDS PROMPTING
MULTICODE

ISDN	1
IP-based networking	2
Voicemail	3
LAN connectivity	4
ADSL/DSL/ Broadband	5
Call queuing and routing	6
Unified communications e.g. with mobiles	7
More lines	8
Other (specify)_____	9
DK	97
Refused	99

IPQB7 Which supplier(s) do you use for IP-based services?
READ OUT LIST IF REQUIRED BY RESPONDENT
MULTICODE

BT	1
Cable & Wireless (incl. former Energis & thus)	2
Colt Communications	3
Daisy Communications	4
KCOM (incl. Kingston Communications & Affiniti)	5
Virgin Media (incl. NTL:Telewest)	6
Opal Communications	7
Unicom	8
XLN	9
AT&T	10
MCI	11
Global Crossing	12
Spitfire	13
Other (specify)	14
DK	97
Refused	99

IPQB8 Approximately how much does your organisation spend annually, across all UK sites, on IP-based services?

SINGLE CODE

Under £1,000	1
£1,000 to £2,499	2
£2,500 to £4,999	3
£5,000 to £9,999	4
£10,000 to £19,999	5
£20,000 to £49,999	6
£50,000 to £99,999	7
£100,000 to £249,999	8
£250,000 to £499,999	9
£500,000 to £999,999	10
£1,000,000 to £4,999,999	11
£5,000,000 to £9,999,999	12
£10,000,000 or more	13
DK	97
Refused	99

IPQB9 Approximately how long have you been using IP-based services?

SINGLE CODE

Less than six months	1
Six month to twelve months	2
Twelve months to eighteen months	3
Eighteen months to Twenty-Four months	4
Two to Five years	5
Six to Ten years	6
Ten to Fifteen years	7
Sixteen to Twenty Years	8
Over Twenty Years	9
DK	97
Refused	99

IPQB10 Do you consider IP to be:

SINGLE CODE

Your primary service	1
A supplementary service used in addition to your main service	2
A back-up system in case your main systems fail	3
Other (specify)	4
DK	97
Refused	99

GO TO QE1a

C) ISDN30 Usage

I'd now like to ask you some questions specifically about your usage of ISDN30 services.

QC1	Do you purchase ISDN30 as: SINGLE CODE		
	A standalone service	1	GO TO QC3
	Part of a package of in-house services	2	GO TO QC2
	Part of a managed or hosted solution	3	GO TO QC2
	DK	97	GO TO QC3
	Refused	99	GO TO QC3

QC2	What other services are provided as well as ISDN30? MULTICODE		
	PSTN	1	
	ADSL/Cable broadband	2	
	Call management/routing	3	
	Leased lines/VPNs	4	
	PBX or Centrex service	5	
	Other (specify)	6	
	DK	97	
	Refused	99	

QC3a Overall, what do you regard as the main functional value(s) of ISDN30 for your organisation?
READ OUT IF RESPONDENT REQUIRES PROMPTING
MULTICODE

QC3b	What is the most important functional value? SINGLE CODE		
		QC3a	QC3b
	Flexible line capacity	1	1
	Call management functionality	2	2
	Easy to use	3	3
	Reliable	4	4
	Requires little post purchase support	5	5
	Voice connectivity	6	6
	Data connectivity	7	7
	Provides voice & data communications via the same service	8	8
	LAN connectivity	9	9
	CTI capability	10	10
	Other (specify)_____	11	11
	DK	97	97
	Refused	99	99

QC4 Have you ever switched your ISDN30 supplier?
SINGLE CODE

- Yes – switched in the last two years 1 GO TO QC5
- Yes – switched longer ago than the last two years 2 GO TO QC5
- No – have never switched 3 GO TO QC6
- DK 97 GO TO QC6
- Refused 99 GO TO QC6

QC5 What prompted you to switch or consider switching your ISDN30 supplier?
MULTICODE

- Contract came to an end 1
- Was offered a better deal (price) 2
- Was offered a better quality of service 3
- Was offered a more attractive package/range of services 4
- Other (specify) 5
- DK 97
- Refused 99

QC6 Are you currently considering switching away from ISDN30 services?
NOTE THAT THIS IS CHANGING TO A DIFFERENT SERVICE, NOT JUST CHANGING
ISDN30 SUPPLIER.

- Yes 1 GO TO QC8
- No 2 GO TO QC7
- DK 97 GO TO QC10
- Refused 99 GO TO QC10

QC7 Why would you not consider switching from ISDN30?
READ OUT IF RESPONDENT REQUIRES PROMPTING
MULTICODE

- ISDN30 is reliable 1
- Good contacts at existing company 2
- Tied to long term contract 3
- Price of alternative services too high 4
- Hassle 5
- Current supplier(s) understand our business 6
- Historic links to existing company(s) 7
- Easier to manage one supplier 8
- High internal costs associated with switching 9
- Current service features are what we need 10
- Other (specify) 11
- None of the above 96
- DK 97
- Refused 99

GO TO QC10

QC8 What do you perceive are the benefits of switching away from ISDN30?
MULTICODE

Lower price.....	1
Better value for money.....	2
Less expensive equipment required	3
Greater functionality	4
More reliable	5
Better service features	6
Requires little post purchase support	7
Provides voice and data communications via the same service	8
More scalability as company grows	9
More flexibility to add/change services	10
Ability to change numbering beyond local exchange.....	11
More options for LAN connectivity	12
Other (specify).....	13
DK	97
Refused	99

QC9 Do you have any hang-ups/concerns about moving away from ISDN30?

Yes – Reliability of alternative	1
Yes – Security of alternative	2
Yes – High price of alternative	3
Yes - Other (specify)	4
No – None	5
DK	97
Refused.....	99

QC10 If the price of ISDN30 fell by 10% across all suppliers. to what extent would this influence your decision to switch away from ISDN30? In imagining this scenario people often respond differently to how they would in a real situation. Please bear this in mind when answering the questions below and try to respond as if this was **a real situation**. Your decision will not affect the **real life** future prices charged for your ISDN30 services by your provider(s).

Would have little impact – still likely to switch away from ISDN30	1
This would be a consideration but unlikely to affect our decision to switch.....	2
We would be more likely to stay with ISDN30, rather than switch away	3
We would definitely stay with ISDN30	4
DK	97
Refused.....	99

QC11 How sure are you that you would make this decision in a real situation?
SINGLE CODE

Definitely certain	1
Probably certain	2
Probably uncertain	3
Definitely uncertain	4
DK	97
Refused	99

QC12 How long do you envisage continuing to use ISDN30 services for?
SINGLE CODE

Less than six months	1
Six months to a year	2
A year to two years	3
Two to five years	4
Six to ten years	5
More than ten years	6
DK	97
Refused	99

QC13 What are you planning to use when you stop using your ISDN30?
MULTICODE

ISDN2/2e	1
SIP Trunking	2
Hosted VOIP	3
IP Centrex	4
Other IP technology (specify)	5
Non-IP Centrex	6
Leased lines / VPN	7
Ethernet	8
Other NON-IP service (specify)	9
Would not replace service (Do not read out)	10
None – Closing down (Do not read out)	11
Not thought about it (Do not read out)	12
DK (Do not read out)	97
Refused (Do not read out)	99

QC14 If you had to replace ISDN30, which services do you think would be the best replacement? In imagining this scenario people often respond differently to how they would in a real situation. Please bear this in mind when answering the questions below and try to respond as if this was **a real situation**.

Service (please specify)	1
Would not replace (DO NOT READ OUT)	2
DK/Not sure	97
Refused	99

(CATI SCRIPTING NOTE: QUESTION QC14 CAN BE REMOVED IF QUESTIONNAIRE TIMES OVER ALLOCATED TIMING)

GO TO QD1

D) Awareness of IP Services (ISDN30 survey)

I would now like to ask you some questions about IP services.

QD1 Have you heard of IP-based alternatives to ISDN30 (e.g. SIP trunking?). IP-based solutions are services based on internet protocol technology that can be used as a replacement for ISDN30 services. This includes Voice over IP (VOIP) telephony services, including SIP Trunking solutions and Centrex services provided by IP networks (so called 'hosted VOIP' solutions).

SINGLE CODE

Yes	1	GO TO QD2
No	2	GO TO QF1
DK	97	GO TO QF1
Refused	99	GO TO QF1

QD2 Can I confirm whether you have any plans to move from ISDN30 to IP services in the next 12 months to 2 years?

SINGLE CODE

Yes	1
No	2
DK	97
Refused	99

QD3 Has your company ever had experience trialling IP services?

SINGLE CODE

Trialling these services currently	1	GO TO QD4
Planning to trial these services in the near future	2	GO TO QD4
Have trialled these services but decided not to go ahead	3	GO TO QD5
Trialled these services and plan to implement in near future	4	GO TO QD4
None of the above	5	GO TO QF1
DK	97	GO TO QF1
Refused	99	GO TO QF1

QD4 Are you planning to implement these services permanently at the end of your trial?

SINGLE CODE

Yes	1
Too early to say	2
No	3
DK	97
Refused	99

QD5 Do you have any concerns about moving to IP technologies?

IF QD3=4, What were your concerns about moving to IP technologies?

MULTICODE

Don't know enough about it	1	GO TO QF1
Quality of service	2	GO TO QF1
Reliability	3	GO TO QF1
Resilience	4	GO TO QF1
Security	5	GO TO QF1
Price	6	GO TO QF1
Unable to meet business needs	7	GO TO QF1
Cost of investment needed	8	GO TO QF1
Lack of commercial offerings	9	GO TO QF1
Immaturity of commercial offerings	10	GO TO QF1
Happy with current system	11	GO TO QF1
Other (please specify)	12	GO TO QF1
DK	97	GO TO QF1
Refused	99	GO TO QF1

E) IP Usage

I'd now like to ask you some questions specifically about your usage of IP services.

QE1a What were your reasons(s) for choosing to implement IP services?

QE1b What was your most important reason for choosing to implement IP services?

	QE1a MULTICODE	QE1b SINGLE CODE
Quality of service	1	1
Reliability	2	2
Resilience	3	3
Security	4	4
Price- lower rental than ISDN30	5	5
Price – lower call costs	6	6
Free on-net calls	7	7
Additional features	8	8
Flexibility (able to deliver traffic to different locations)	9	9
On-demand capacity/scalability	10	10
To maximise existing PBX investment	11	11
To integrate voice and data services	12	12
As part of system upgrade	13	13
Other (please specify)	14	14
DK	97	97
Refused	99	99

QE2 Did the move to IP require investment in new equipment?
SINGLE CODE

Yes	1 GO TO QE3
No	2 GO TO QE4
DK	97 GO TO QE4
Refused	99 GO TO QE4

QE3 Approximately, how much did it cost to move to IP services?

ESTIMATE OK
SINGLE CODE

Under £1,000	1
£1,000 to £2,499	2
£2,500 to £4,999	3
£5,000 to £9,999	4
£10,000 to £19,999	5
£20,000 to £49,999	6
£50,000 to £99,999	7
£100,000 to £249,999	8
£250,000 to £499,999	9
£500,000 to £999,999	10
£1,000,000 to £4,999,999	11
£5,000,000 to £9,999,999	12
£10,000,000 or more	13
DK	97
Refused	99

QE4 Has the move to IP saved you money on your regular bills?
SINGLE CODE

Yes	1	GO TO QE5
No	2	GO TO QE6
DK	97	GO TO QE6
Refused	99	GO TO QE6

QE5 Approximately how much per year has the move to IP saved you on your regular bills?
SINGLE CODE

Under £1,000	1
£1,000 to £2,499	2
£2,500 to £4,999	3
£5,000 to £9,999	4
£10,000 to £19,999	5
£20,000 to £49,999	6
£50,000 to £99,999	7
£100,000 to £249,999	8
£250,000 to £499,999	9
£500,000 to £999,999	10
£1,000,000 to £4,999,999	11
£5,000,000 to £9,999,999	12
£10,000,000 or more	13
DK	97
Refused	99

QE6 To what extent is your organisation still using any ISDN30 services?
SINGLE CODE

As supplementary service used in addition to IP-based services	1
As a back-up system in case main IP-based services fail	2
Other (specify)	3
DK	97
Refused	99

QE7 Overall, what do you regard as the main functional value(s) of IP-based services for your organisation?
READ OUT IF RESPONDENT REQUIRES PROMPTING
MULTICODE

Flexible line capacity	1
Call management functionality	2
Easy to use	3
Reliable	4
Requires little post purchase support	5
Voice connectivity	6
Data connectivity	7
Provides voice & data communications via the same service	8
LAN connectivity	9
CTI capability	10
Unified communications capability	11
Other (specify) _____	12
DK	97
Refused	99

F) Conclusion

Thank you for your feedback. This will be extremely valuable.

QF1 Do you give permission for any of the responses you have given today to be attributed to your organisation in reporting the results of the research?

SINGLE CODE

Yes 1
No..... 2

On behalf of Ofcom and Prodata, I would like to thank you for taking part in this research project. Your answers are very important to Ofcom, and we appreciate your time today.

