

Topic: **Broadband – Who Needs It?**
CAD & Broadband

In the July issue of *iCAD*, we reported on the current and predicted levels of broadband connections across Europe (see '[The European Broadband Picture](#)'). IDC predicts a massive increase in the number of business broadband connections in the next 5 years, but are there any signs yet that engineering, manufacturing, architecture and construction companies regard broadband technologies as integral to their e-business strategies? Last month, in order to find out the position in the UK, we spoke to managers responsible for CAD/CAM functions at 250 sites from a cross-section of industry sectors.

iCAD is produced by Business Advantage, a B2B research, business development and marketing consulting practice operating in the global IT, Digital and Telecommunication sectors.

Current Connections

45% of our sample relies on dial-up Internet/email access; just over a third use a combination of ISDN and dial-up access, and **only 8% have broadband access** (5% DSL, 3% leased line or cable).

The response of a further 11% of the managers with responsibility for CAD/CAM functions speaks volumes for their commitment to e-business - they do not know what type of Internet access their site has!

The Main Broadband Options....

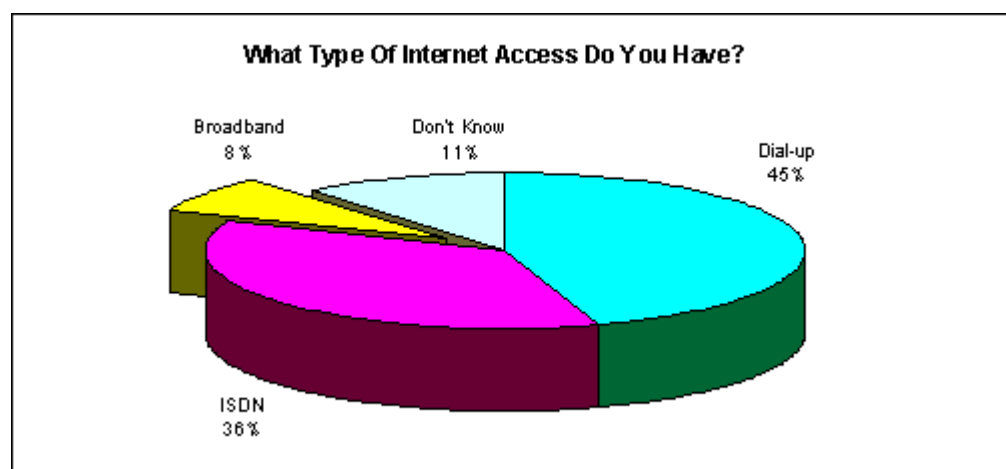
DSL (Digital Subscriber Line): Public network technology that delivers high bandwidth over conventional copper wiring at limited distances. There are four main types of DSL: ADSL, HDSL, SDSL, and VDSL.

Cable: Utilises the cable TV fibre network but can only be provided in regions with cable access.

Leased Line: Requires the laying of cable directly to business sites - the most expensive option but offers higher data rates than the above options.

Wireless Local Loop (WLL): Requires terminals at business premises with line of sight to the WLL base station.

Satellite Broadband: Uses a standard satellite dish to receive data.



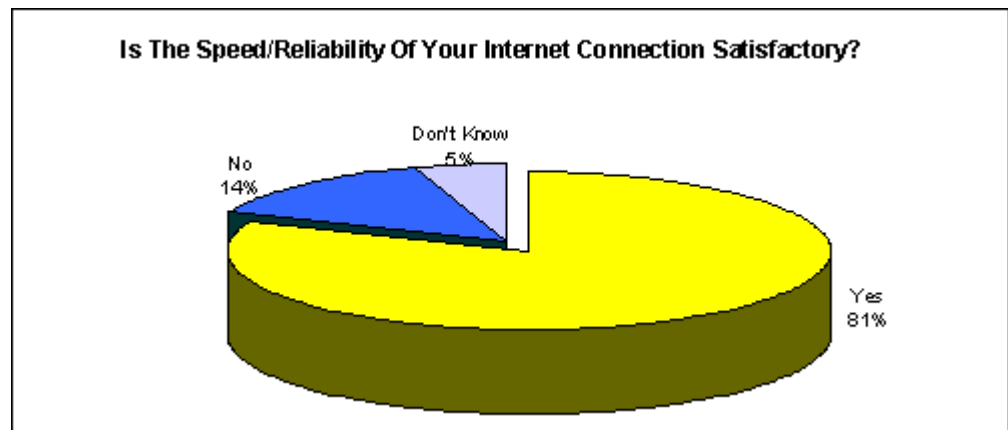
Looking at our sample by CAD/CAM application area, mechanical engineering was the only group of sites large enough for meaningful analysis; here the distribution of Internet

access was similar to that of the overall sample, with 40% just having dial-up access, 38% using ISDN and dial-up, and 9% using broadband.

Not surprisingly, larger sites are more likely to have invested in faster access; 70% of sites with less than ten staff rely purely on dial-up access, compared to 21% of sites with more than fifty staff.

Speed Satisfaction

The vast majority (81%) of our sample feel that the speed and reliability of their Internet connection is satisfactory for their needs - for many of these though the Internet plays only a very limited role in their operations. There are 14% who are not satisfied with the speed/reliability of their connection and 5% who aren't sure one-way or the other.

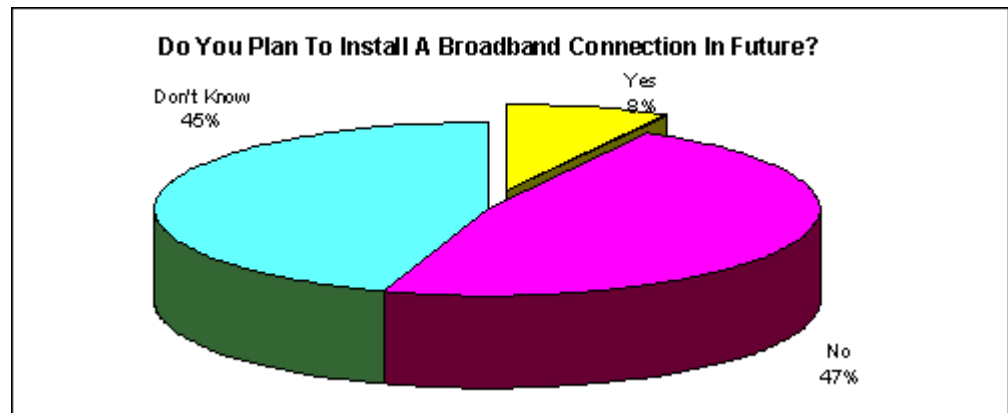


Broadband Considerations

How many sites are sufficiently interested in developing their communications and Internet strategy to investigate switching to broadband? **A quarter of our sample has looked into the costs/benefits of upgrading to a broadband connection.** Nearly a third said that they weren't aware that the issue had been looked into, and 45% said definitely that the issue had not been investigated.

Firm Intentions

Only 8% of our sample is definitely planning to switch to a broadband connection (DSL, cable modem, leased line or other). Nearly half have no plans to switch to broadband, and 45% are undecided. Looking at the sample by CAD/CAM application area, the intentions of Mechanical Engineering sites are very similar to that of the whole group, with 7% definitely intending considering switching to broadband.



Broadband Importance

How important does our group of CAD/CAM managers feel that broadband access will be to their area of business in future? **Only 6% thought that broadband will be vital to the product development process**; nearly a third consider it will be important or fairly important; while 45% think it unimportant.

Conclusion

Many telecommunications analysts regard the slow rate of broadband deployment in the UK as a serious threat to business, creating a division of the country into high- and low-connectivity areas. Our survey provides further evidence that, for a broad swathe of engineering, architecture and construction companies, it is a lack of interest in investigating the benefits of faster connections that is a bigger issue. The patchy availability of broadband must be considered when analysing the attitudes and intentions of potential users - for example 12% of our sample said that a DSL connection was unavailable in their area. More tellingly however, 65% didn't know if DSL is available or not. Even where it is available, many businesses are not using it because they have not been convinced of the benefits of the solutions and services that tend to require more bandwidth.

We saw in last month's edition of *iCAD* that for the broad range of collaborative activities,



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only small proportions of CAD/CAM using sites are using email and the Internet for much more than sending models/drawings as attachments (see '[Collaboration Uncovered](#)'). A quarter of our sample has looked into the cost/benefits of broadband, yet only 8% have actually decided to install a broadband connection. The unsatisfactory state of affairs in the UK broadband market will be playing its part - it is significantly more expensive than Germany for example - but a lack of commitment to potentially bandwidth-hungry Internet solutions is also a major factor.

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