

# **Annual Review of Internet Usage 2004**

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# **Internet Usage in Jersey – JCRA 2004 Trend Report**

## Introduction

In common with regulatory authorities in other jurisdictions the JCRA monitors usage of the Internet and the means by which users access the service.

Internet access is available in Jersey through a number of Internet Service Providers ("ISPs") both on-Island and off-Island, although because of the technical restrictions imposed on interconnection of Local Rate (0845) and Freephone (0800) Internet services, not all such ISP's are accessible from Jersey and off-island broadband services are also unavailable.

# **Overall Internet Usage**

During 2004 the number of ISP and Internet access accounts among all operators in Jersey grew by just 1% overall. This is shown in Figure 1 which also shows the percentage growth of broadband connections as a factor of the overall total. It is perhaps because of the way that ISP's have collated their data that it appears that overall usage has declined by about 7% since the beginning of 2003.

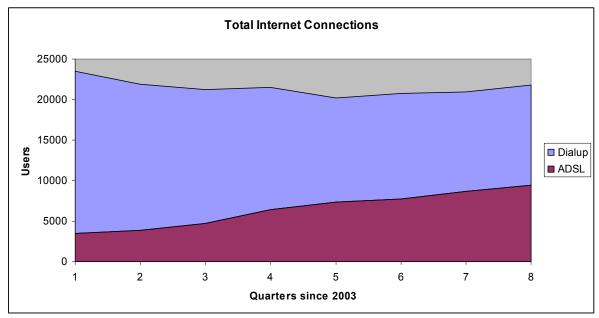


Fig 1

Dial-up access (Figure 2) appears to be holding its own against the trend towards broadband, showing only a slight decrease overall during 2004. This may be in some way contributed to by the methods used by operators to account for their users and so there is a possible overestimation in the number of users continuing to use this service.

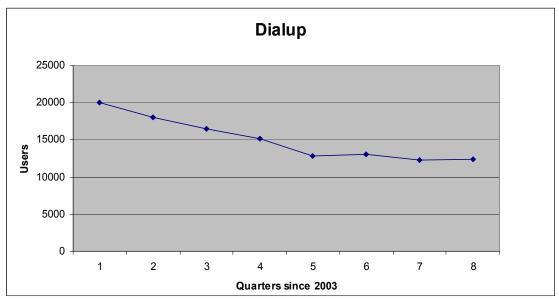


Fig 2.

#### Internet Penetration

Overall penetration of Internet usage is sometimes interpreted as the number of ISP registered accounts as a percentage of the population, and sometimes as a percentage of the number of households in the jurisdiction. According to the States of Jersey Statistical Review 2002 there are 35,562 households in the Island and the JCRA estimates 21750 registered accounts at the end of 2004. This would represent a penetration of about 61%. as shown in Figure 3.

This represents an overall decline in the number of households using the Internet which is perhaps a concern. However, since last year was the first time that statistics had been collated and ISP's are now providing more up-to-date data from their records, this could indicate that last year's data was overoptimistic or distorted for other reasons.

Nevertheless, this latest data would indicate that Internet usage has fallen below the EU average.

It is likely to take another round of data collection before this possible statistical anomaly can be resolved.

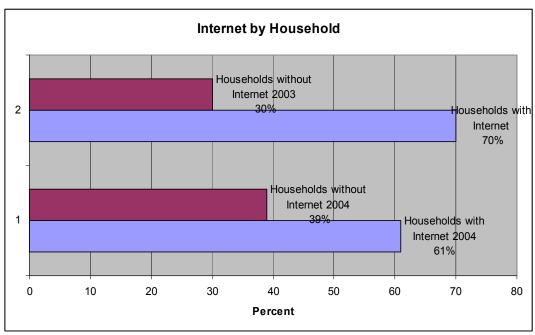


Fig 3

## **Broadband**

Broadband growth has been steady throughout the year. Figure 4 shows the growth during the 12 month period.

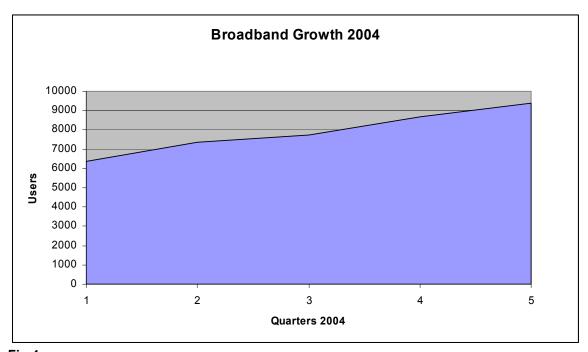


Fig 4

The growth of broadband has largely been at the expense of declining Dial-up access as users switched to the faster service. Users who use the Internet for more than about 35 hours a month on average would have found a net cost benefit in switching to broadband access (see below). This would be especially so to those who rented a separate fixed line for this purpose.

The trend in switchover from Dial-up to Broadband is illustrated in Figures 6. Predicting the ultimate penetration of broadband access is difficult as technology and the services offered develop. For instance, new versions of DSL have been introduced during 2004 including SDSL services for Jersey businesses.

Some users may not wish to switch to Broadband, especially if they are low users or only use their access to recover email. For this group there is perhaps also little incentive to change since the additional cost provides little net benefit. Moreover, this is possibly also a group that would not necessarily subscribe in future to more advanced Broadband services for financial or other reasons. Furthermore, there has been no further price reduction in the sector affecting residential users during the period (see below).

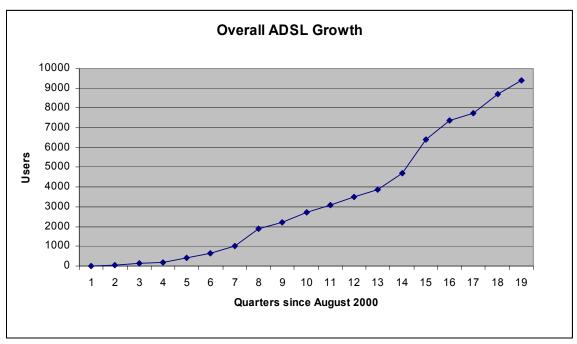


Fig 5

The annual rate of broadband growth during 2004 averaged about 9% while dialup declined only about 2% overall. This would indicate that new users prefer broadband, however, there is still some uncertainty in the accuracy of overall ISP data, particularly with regard to dialup.

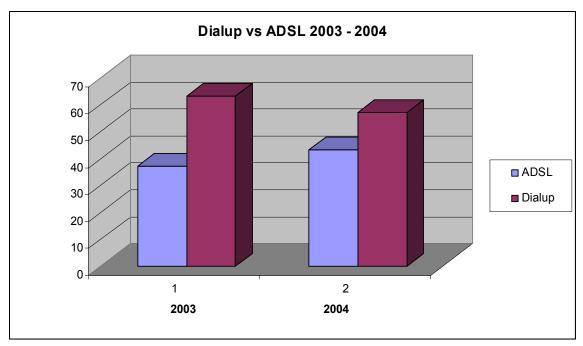


Fig 6

#### Mobile Internet Access

Access to the Internet via mobile telephones was enabled during 2003 as Jersey Telecom introduced their GPRS and then later MMS services. New statistical collation methods have not been fully developed to indicate usage in this sector. It is hoped to include more data in the next published set. Access is still available from mobiles as narrowband dialup.

# **Pricing**

In Jersey there are a number of payment schemes available for Internet access, depending on the ISP and/or the method of connecting.

For dial-up customers there is a choice of connecting either through a pay-as-you-go service or by monthly subscription. The monthly subscription ISP services provide the user with more facilities than the pay-as-you-go service but access is through a normal directory number, which is billed at the standard rate.

ADSL services are provided by several operators for a fixed monthly fee, with no addition call charges.

Dial-up rates are set at a maximum data rate of 56kb/s, which equates to a real data rate of 45kb/s, but the actual rate experienced by a user will depend on their own modem and the quality of the telephone line over which they are connecting. Access is also available over ISDN services, where data rates of 64kb/s or 128kb/s may be achieved with more certainty. However, ISDN has declined in popularity since the introduction of ADSL and now represents an insignificant contribution to the overall data.

## Dial-up

### Pay-as-you-go

The local call charging methodology in Jersey is quite different from that in other jurisdictions. Currently, there is a minimum call charge of 7p for a period of up to 30 minutes; thereafter, it is charged pro-rata for all subsequent time. The minimum charge level also applies to the pay-as-you-go service which, on a standard line, is nominally 1p per minute evenings and weekends and 2p per minute at other times. This is accessed via a "Local Call Rate" 0845 number although the minimum 7p charge is applied. Thus a user must remain on line for a minimum period of 7 minutes (or 3.5 minutes peak rate time) to obtain par value. This makes the overall calculation of comparators somewhat difficult, if, for example, a low usage Internet user only logs on occasionally to send and/or receive email for less than the par value time. Therefore, although the headline rate is a per-minute rate, the actual rate can be aggregated to be slightly more. The Internet access services provided using this method of connection do not provide any POP mail, web space or other "value added" ISP services such as spam filtering and firewalling.

Based on this assumption, then the comparator rate against ADSL will be, on average between 34.5 hours and 41.5 hours of Internet usage per month. That is around 1½ hours per day. This comparator assumes the various price offers available for ADSL services, see below.

## **Pre-paid Internet Access**

Pre-paid Internet access in Jersey is accessed either via a local directory number or via a Freephone (0800) number. Of the available 0800 service providers only AOL offers services in Jersey. This is largely due to technical trunk routing issues. AOL's service is £13.99/month for a maximum of 30 hours access, thereafter, access is charged at 1p per minute for all additional time. AOL explains that this is because of the additional costs involved with providing 0800 services to the Channel Islands.

There are local providers of Internet access who use a local directory number for access. These providers charge between £14.50/month and £14.99/month for a full ISP service

including POP mail, web space and other value-added services, the range of which depends on the actual provider. Access charges are again set at 7p for 30 minutes with subsequent minutes at pro-rata, although there is also a minimum charge of 7p which means that users must stay on line for at least 30 minutes per access to gain par value. Using this method of access, and assuming an offset for the minimum charge, users would need to use between about 57 hours to 75 hours per month to justify changing to ADSL. This equates to about 1 hour 50 minutes to 2 hours 30 minutes of Internet access per day. Again, this takes into account the available prices of various ADSL tariffs.

#### **ADSL**

All ADSL services rely on the provision of services by Jersey Telecom either through their own retail division or by way of wholesale access for other ISP's.

Currently, Jersey Telecom offers a range of products for residential and business customers in various packages of bandwidth and contention ratios which range from 20:1 to 40:1.

Consequently, prices for such services are determined to a greater or lesser extent by the wholesale price, therefore there is a tendency for price similarity between suppliers. Pricing has remained the same as in the 2003 report.

#### SDSL

During 2004 Jersey Telecom launched their Symmetrical Digital Subscriber Line product which enables data transfers at the same rate in either direction.

As yet Jersey Telecom has not produced a wholesale version of this product and pricing is considerably higher than equivalent download speed ADSL products, for example, the 1Mb/s product is currently priced at £290.00/month at 5:1 contention ratio.

No statistics are yet available on this product.

# Comparison with Other Jurisdictions

Prices across the entire EU have decreased over the last 12 months, and download speeds have increased. Table 1 below gives a sample of prices in Euros per month and download bandwidth in different jurisdictions. It should be noted that direct comparison is difficult because of the mix of speed, contention ratios and services offered by each supplier. The table make comparisons with popular offerings among a range of EU countries.

Jurisdiction	Provider	Download BW	Price €	Notes
France	Tiscali	2Mb/s	30.00	Includes VoIP*
France	Alice Telecom	1Mb/s	10.99	Burstable †
Netherlands	Wanadoo	512kb/s	22.50	Includes VoIP*
Belgium	Adsl2Fit	2Mb/s	28.98	Burstable †
Germany	Congster	2mb/s	25.99	Burstable †
UK	Wanadoo	1Mb/s	25.00	Burstable †4Gb/month limit
Hull	Kingston Comms	750kb/s	39.50	
Jersey	Localdial	512kb/s	34.50	
Guernsey	Cable and Wireless	512kb/s	38.00	
IOM	Manx Telecom	512kb/s	21.50	

Table 1

This comparison shows that ADSL residential services in Jersey are in the upper quartile of EU comparative costs see Figure 7. Basic service in some EU countries is as low as €3.99, although this is for a 256kb/s download with 2Gb per month download limit.

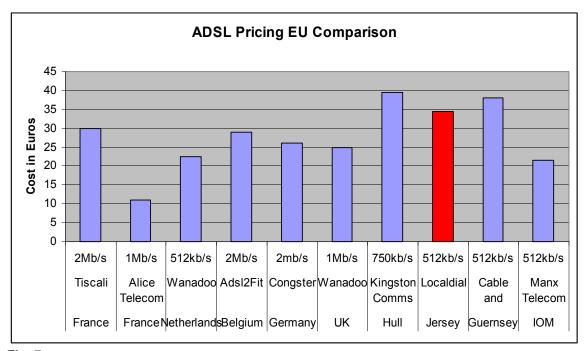


Fig. 7

## Conclusion

According to the latest data, Internet usage and penetration in Jersey is slightly below that of other jurisdictions. The penetration of broadband as a percentage of all Internet accounts is about 41%. As a percentage of the overall population (2001 Census 87,186)<sup>1</sup>,

<sup>\*</sup> Free national calls included in package and reduced international call rates

<sup>†</sup> This service permits up to 8Mb/s download dependent on prevailing contention

<sup>&</sup>lt;sup>1</sup> Jersey Statistical Review 2002

which is a common measure used by EU regulatory authorities, this represents about 10.8%, slightly below the original 15 EU members average which is 12%.

The uptake of ADSL is likely to continue on this upward trend for the foreseeable future. The available data shows that the uptake is approximately linear, with an average increase of about 9% annually, following a surge in accounts at the end of 2003 as a result of price reductions accompanied by heavy promotion.

Statistically measuring the penetration of Internet access in the population is difficult to determine exactly. The number of households with Internet access is high, but the average household in Jersey is 2.38 persons. Additionally, there are a high number of households (64%) which have only one or two occupants and 28% which have only one, and these households are occupied by younger salary-earners more likely to own a Personal Computer than some of the other demographic groups. On the other hand, low occupancy accommodation coupled with employment that has Internet access may preclude Internet usage at home. The falling fixed line uptake could also indicate lower Internet usage, since many low occupancy households may opt for only a mobile telephone. Consequently, the percentage of the population with Internet access at home may be lower than the headline rate would indicate. Many people have access to the Internet through their work, the education system, public libraries and commercial Internet cafés.

Using the average household occupancy figure of 2.38 multiplied by the total number of registered ISP and Internet access accounts, this would indicate a population penetration of 65%, similar to the distribution as a percentage of households. However, with the caveat above of low occupancy of 1 or 2 persons for almost two thirds of households, this possibly may be adjusted down to nearer 55%. This is close to the EU average but lower than the higher penetration jurisdictions such as Sweden.

Although the penetration of Internet is measured here in Jersey, the time spent online is not. However, in January 2005 in the UK, the average home user spent 25.25<sup>2</sup> hours per month surfing.

With the growing use of the Internet for banking, e-commerce, e-government, shopping and other services, such as multimedia downloading and perhaps VOIP and associated services, the average user is likely to spend more and more time on line. This will almost certainly lead to greater user expectations which will further stimulate growth in Internet use and in the requirement for broadband connections.

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<sup>&</sup>lt;sup>2</sup> http://www.nielsen-netratings.com