

SLEAT COMMUNITY TRUST

Wireless Broadband Survey Report

July 2013



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**1 Executive Summary**

**The Review\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

In April 2013 Sleat Community Trust sent out a survey to residents of a Target Area, or Target Areas, selected as potential recipients of a prospective wireless internet service. The Trust has the potential to provide them with high speed wireless technology broadband internet, that they would otherwise be highly unlikely to receive through either current provision or future infrastructure developments. The survey was returned in June of 2013 with a return rate of almost 80%. It is hoped that the survey returns will shed light on the future, as well as current demand and need, for a new high speed wireless connection. The main findings with regard to this analysis of the survey responses are detailed below:

**Main Findings\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* 100 surveys returned
* 79 out of 85 responses directly indicated they would be interested in accessing a faster broadband network, representing over 90% of the survey group
* 26% of the survey response indicated they had no current Broadband provision, and 24% of these responses indicated in some way that they were interested in obtaining a wireless connection.
* The case for the demand for a faster wireless service has been outlined; based upon a cost/ benefit analysis of current broadband provision options, contrasted against the cost/ benefit analysis of the prospective wireless network alternative.
* A general tendency of low speeds correlating to low customer satisfaction was perceived throughout the survey response data.
* A high response level of those who indicated they use the internet was noted across the survey, with particular emphasis in Heaste and Drumfearn; where over 80% of responses indicated they use the internet with their business, and 60% in Aird/ Point.
* The average cost of ADSL cable provision, as provided by BT, was £24, with the most commonly quoted tariff rate being £16. The average speed for this form of broadband provision was 1.5Mb/s.
* The average speeds of satellite provision was roughly the same as that of cable broadband, but monthly costs were disproportionately higher (by 17%)
* There was generally no correlation between service speeds and price paid for service, across examples of both satellite and ADSL cable broadband.
* The average amount respondents gave as the amount they would be prepared to pay in monthly fees for faster broadband service was **£18**
* The average amount respondents were willing to pay in an up-front installation fee for a faster broadband service was **£92,** with the total of 78 respondents cumulatively stating they would be willing to pay a total of **£7,141**
	+ *For specific figures for a given area/ region, see “7- Area by area analysis”*

**2 Introduction:**

The Survey has been aimed at assessing both the needs and demands of putting a higher-speed broadband connection into selected Target Areas for a community-based Wireless broadband service on the Sleat peninsula.

These areas have been selected by the Sleat Community Trust because of the perceived low quality of the current service they receive, as well as the lack of a future fibre-optic broadband connection. It is the aim of this report to draw conclusions with relation to this through analysis of a recent survey carried out within the area (from April to June 2013).

During the course of the report, analysis will be applied generally across the survey group, where appropriate, before looking at more specific grouped geographical locations (as determined by a 2013 Design Study looking into the logistics of rolling the service out within the Sleat area).

**3 The Scope of the Survey**

We have now conducted a fairly comprehensive Survey for the demand for the service, with our first survey sheets going out in April and the last reports coming back in late June (2013).

* The total Target Area identified by the Trust for extension of Wireless Broadband currently includes the areas of Heaste, Drumfearn, Ord, Tarskavaig, Achnacloich, Tokavaig and Aird villages.

**Fig. 1**

The total number of potential Broadband Customers within this Target Area is anticipated to be greater than the 100 responses received from the survey, and it is hoped that these findings may be applied (with some caution) to the totality. Certainly, statistically-speaking, a return-rate in the region of 80% is usually a good indicator of a high degree of accuracy when applying general analysis from the sample. Given this, it would be prudent to anticipate that not all households and businesses within the Target Area that prospectively may buy into the network will have indicated so at this stage.

**4 Current Broadband Provision**

The current arrangements in place which provide broadband coverage in the Target Areas have been judged to be lacking in both quality and basic coverage provision. It is the aim of this section to provide a basic overview on the reported data with regard to these concerns, as well as to provide analysis relating to whether a wireless network could provide a better service.

**4.1 Overview of current broadband provision**

Of the 100 replies we have had back:

* 74 **have internet access**
* 26 **do not have internet access** (with 24 indicating they would be interested)

**Fig. 2**

Applying these percentage figures roughly across the Target Area would equate to something like 180 households & businesses currently with broadband access, and 60 without.

**4.2 The demand & need for a wireless service amongst those who have no current Broadband access**

We had 28 responses stating they had no internet connection across the area. Of these, 26 indicated they would be interested in a new connection. This equates to over 90% of the total. There is a clear and unequivocal statistically-informed demand for the service

**4.3 Overview of current Broadband providers:**

Of the total internet users who gave details of their service providers:

**20%** had a satellite connection

**78%** received their internet through a BT ADSL exchange

**2%** was split between two other cable broadband service providers

\*Note on developments since survey responses: We will now have had Hebnet signing up its first customers in Taskervaig

 **Fig. 3**

**4.4 Cost-quality analysis of current satellite coverage options**

The cost of this service for QSat customers averaged around £32.20 per month, with quoted prices varying greatly from £18 to £36. This was also the case with Scotsat, with their two customers paying £20 and £59 (for broadband speeds at 5Mb/s and 0.5Mb/s respectively).

Generally, there was no apparent correlation between cost incurred and broadband speed received. Despite this there was one notable exception; where a report of an broadband speed of 5Mb/s was given at a price of £20 per month (from a Scotnet customer), indicating a much more competitive service.

Otherwise, the reported broadband speeds of the various satellite internet services varied widely across cases and across the two principle companies, Scotnet and Qsat, ranging from sub 0.5Mb/s to 5Mb/s. Within this range, the average quoted speed for QSat customers was 0.8Mb/s (average taken over the total of 5 reports that provided broadband speed data in their report).

The generally stated maxim that quoted broadband speeds correlated to the stated quality of service was certainly true in these instances -with satisfaction with the service also ranging widely across the sample.

When cross-analysed, Satellite provision was typically achieved at a lower quality than that achieved over a comparable service over copper ADSL cable, with speeds on average 0.1Mb/s slower than the average BT Broadband service (taken across the survey). This cost 17% more on average when compared with the same data taken from users via ADSL Cable Broadband.

**4.5 Cost-quality analysis of current ADSL cable coverage (special focus on BT)**

The **cost** of BT broadband packages varied fairly widely across the sample range [*see below*]:

Key BT Cost Facts:

* The average cost across the survey of a monthly tariff from BT was **£24**.
* The most commonly quoted single tariff rate was **£16** per month.

Interestingly, when these costs are compared against the speed of the service, across all areas, there there is typically no correlation between an increase in cost and an improvement in service speed. This would be indicated by a positive correlation in the scatter diagram below:

The Broadband service provided by BT generally did not exceed 0.5Mb/s. This might be explained by BT’s supposed policy of “capping” Broadband capacity per Household to 0.5Mb/s.

There was a lot of confusion in the survey responses relating to BT’s promotional materials advertising the service often as “Unlimited” (up to 16 to 20Mb/s) despite the fact that in none of the cases were speeds in this range quoted.

Generally, across the data retrieved from BT customers, service was charged at an average of £24, with service speeds averaging out at around 1.5Mb/s.

**4.6 Sub-conclusions on the theoretical demand for a Wireless alternative to current coverage options**

We can now contrast both the figures taken from both ADSL and Satellite service providers with what we know we might reasonably expect from a wireless broadband alternative:

Based upon the surveyed section of Hebnet (Wireless provision) customers, we could reasonably expect costs in the region of £15, increasing to £18 with VAT. This compares very favourably with the average BT Broadband tariff rate across the area, while remaining competitive with the lowest paying 10% of BT customers in the sample group.

Furthermore, we expect to receive Wireless speeds far in excess of those currently surveyed, with speeds reaching 6Mb/s. Even with fluctuations this still sets the bar very much higher than BT ADSL Cable Broadband, average of 1.5Mb/s within the Target Area, with quoted median speeds typically of 0.5Mb/s.

This demonstrates a clear theoretical economic demand for the Wireless Broadband, with such a service being competitive on price, as well as superior in service speed. This is applicable across the Target Area, as well as being clearly demonstrated in the survey. It is worth noting there was some feedback from the lower-end of the BT price-scale that they would not upgrade to a higher-speed network if it cost them more than their current rate.

**5 Overview of stated demand for a faster broadband network**

Further to stating this theoretical demand, the most obvious indication would be the responses to the direct question asking whether current customers would be interested in a faster alternative. This would also go some way to demonstrating a perceived correlation between service speed and customer satisfaction elsewhere in the survey responses.

Across the Target Area, **79** of the total **85** responses to the question: *"Would you be interested in a faster Broadband Network?"* came back positive, with only **6** indicating they would not. Compared with all other available data this represents the best data indicating the demand for a new, high-speed wireless service.

**6 General costs willing to be met for a faster network by survey respondents**

The average amount respondents gave as the amount they would be prepared to pay in monthly fees for faster broadband service was **£18**

The average amount respondents were willing to pay in an up-front installation fee for a faster broadband service was **£92,** with the total of 78 respondents cumulatively stating they would be willing to pay a total of **£7,141**

**7 Area by area Analysis**

In order to demonstrate the potential viability of the service, a case-by case examination of each area is aimed at assessing stated demand in each specific instance, along with the other indicative factors.

By weighing the potential demand for the service, it is hoped that data collected in each instance will be used to assess the potential viability of providing the service against the likely costs. Areas have been grouped together based upon the logistics of rolling out the service, such as the cost of installing infrastructure, as distinct to each. The details of this are detailed in a January 2013 Design Study by Rural Broadband Networks.

**7.1 Drumfearn**

**Faster Broadband Interest**

* All answered reports in Drumfearn stated an interest in a faster broadband network.

The most obvious point to note in the case of Drumfearn is the very high proportion of the survey responses which indicated they had no Broadband access. Even amongst those that did have access to Broadband, 90% achieved this via a satellite service provider.

Current provision customer satisfaction was generally low, with average tariff costs disproportionately high [detail].

Speeds were variable, but generally slower than average, at 0.8Mb/s for satellite provision customers.

Furthermore, customers typically paid more for this service.

**Business Use:**

* **90%** of those who responded to the question on Broadband use indicated they would use the connection for their business.

**Installation Fees:**

* The average amount of money quoted for installation costs across the sample was **£85**, with the 10 responses pledging at total commitment of up to **£845**.

**Monthly Tariff:**

* **£22** was the average amount responders to the question stated they would be willing to pay in a monthly tariff for the service.

**7.2 Heaste**

All surveyed responses from Heaste indicated they had Broadband Access, with all customers purchasing from an ADSL cable source. This service was relatively slow –conforming to ADSL average speeds across the area.

**Interested in Faster Broadband**

* **All** answered reports in Heaste cited an interest in a faster broadband network.

Customer satisfaction was very low in Heaste, possibly reflective of the very low speeds quoted. -Of the 8 responses which gave speeds, this gave an average of 0.9Mb/s (0.6Mb/s slower than the average across the survey for ADSL Provision)

Average monthly service costs were on par with the survey average for ADSL broadband provision (£24)

**Business Use**

* **82%** stated the service would be used by their business (9/11 of those who responded to the question).

**Installation Costs**

* The average amount of money quoted for installation costs across the sample was **£70**, with the 13 responses pledging at total commitment of up to **£915**.

**Monthly Tariff:**

* **£20** was the average amount responders to the question stated they would be willing to pay in a monthly tariff for the service.

**7.3 Ord**

* 4 out of 13 responses from Ord indicated they currently had no broadband connection

9 of the 10 who responded to the question stated they would be interested in accessing a faster broadband network.

1 response indicated they were not interested.

Boradband provision was provided predominantly via ADSL Cable, with BT being the only service provider

Broadband speeds were some of the lowest across the survey in Ord, with an average well below 0.5Mb/s.

Costs amongst those currently with BT were on par with the BT survey average, with the most commonly stated tariff rate being £16.

The cost of satellite provision for the 1 satellite customer in the area was well above this rate.

A moderate proportion of respondents stated they use the internet with their business, indicating the extra-importance of the service in their routine use, as well as a reliance on broadband provision over-and-above that required for just home use.

**Installation Fee:**

* The average amount of money quoted for installation costs across the sample was given at **£134**, with the total **8** responses pledging at total commitment of up to **£1,070**.

**Monthly Tariff:**

* **£24** was the average amount responders to the question stated they would be willing to pay in a monthly tariff for the service.

**7.4 Tarskaviag**

**Total Broadband Provision**

* 20 out of 25 responses from Tarskavaig indicated they currently had no broadband connection.

**Interested in Faster Broadband**

* **All** answered reports in Tarskavaig cited an interest in a faster broadband network (25).

Of the 18 who responded to the question on perceived quality of service, 13 stated it was “poor”.

The 3 responses who stated the service was “excellent” were all satellite customers (who all quoted broadband speeds well in excess of the average).

The majority of the rest of the results were from BT ADSL customers, who experienced universally slow broadband speeds.

**Installation Fee:**

* The average amount of money quoted for installation costs across the sample was **£96**, with the total 25 responses pledging at total commitment of up to **£2,398**.

**Monthly Tariff:**

* **£16** was the average amount responders to the question stated they would be willing to pay in a monthly tariff for the service.

**7.5 Achnacloich**

Of the 4 responses from Achnacloich, all had BT Broadband at sub 0.5Mb/s speeds. The majority of responses indicated they were unsatisfied with the service, and all indicated they were interested in a faster service. The average monthly cost they were willing to pay was £15, with an average installation fee of £63 (from a total of £250 pledged). Half of responses (2) indicated that they use the service for their business.

**7.6 Tokavaig**

**Total Broadband Provision**

* 3 out of 7 responses from Tokavaig indicated they currently had no broadband connection.

**Interested in Faster Broadband**

* **All** answered reports in Tokavaig cited an interest in a faster broadband network (total of 8).

There were only 4 responses to the question on current service satisfaction. Unfortunately this doesn’t really make for decent statistical information. 2 indicated they believed the service to be satisfactory, while 2 stated it was poor.

The majority of current broadband users are with BT, via ADSL Broadband. Results were unclear as to the speed or cost of this service, but it is expected that this service will be in line with average BT customer monthly costs, with speeds <0.5Mb/s.

**Installation Fees:**

* The average amount of money quoted for installation costs across the sample was **£122**, with the 8 responses pledging at total commitment of up to **£975**.

**Monthly Tariff:**

* **£17.50** was the average amount responders to the question stated they would be willing to pay in a monthly tariff for the service.

**7.7 Point of Sleat/ Aird**

**Total Broadband Provision**

* 3 of the total 16 responses from Aird and Point of Sleat indicated they currently had no broadband connection.

13 out of the 16 responses from Aird & Point of Sleat stated they would be interested in accessing a faster broadband network.

3 indicated they were not interested.

Broadband coverage for the area was given as predominantly via ADSL Cable, with the service provided by BT.

Broadband speeds were generally reported as above average (for both BT customers as well as the survey whole), possibly accounting for the greater proportion of satisfied customer responses.

Broadband speeds appeared to be not be capped by BT in this area.

A high proportion of respondents stated they use the internet with their business, indicating the extra-importance of the service in their routine use, as well as a reliance on broadband provision over-and-above that required for just home use.

**Installation Fee:**

* The average amount of money quoted for installation costs across the sample was **£88**, with the total 10 responses pledging at total commitment of up to **£875**.

**Monthly Tariff:**

* **£20** was the average amount responders to the question stated they would be willing to pay in a monthly tariff for the service.