

Broadband Steering Group

Minutes of the Meeting held on the 14th March 2022 @ 7:30 pm at Fernaig House

1 Present and Apologies

Present: Phil Game, Mary MacBeth, Kath Smith, Neil MacRae

2 Approve and adopt previous minutes

The previous minutes for February, were proposed by Kath, seconded by Neil

Copies of previous minutes are on our website at:-

<http://www.stromeferry-and-achmore.co.uk/index.asp?pageid=433827>

3 Chairman's report

3.1 Bandwidth

There were no capacity issues in February.

New location at the Lochcarron Shinty Club - Our equipment has been installed along with the mains power. In the past couple of days the broadband service has been connected but the speed is very poor at just 40 Mbps. We will also need a static IP address to allow remote access. We will take this up with Plusnet. **Action: Phil & Mary**

3.2 False RADAR

The Braeintra access point suffered from a spate of false RADAR events on and off for a period of a couple of weeks. As Phil & Mary were away Kath checked the unit every day and if required Kath rebooted it to reset the frequency. When Phil returned the units default frequency was changed, since then there have been no problems. The previous frequency had worked without any significant false RADAR events for years.

3.3 Subscribers

Live subscribers	- 54
Waiting for installations / activation	- 0
Waiting for subscriber's confirmation of details / deposits	- 0
Pending installations	- 4
Waiting for installations	- 12
Leavers since the last minutes	- 0
New joiners since the last minutes	- 3
Total	- 73

The current pending installations are in Ardaneaskan East, Leacanashie and Strome Ferry (2). **Action: Phil**

We have had requests for connections in Lochcarron, Strathcarron and Balnacra; once our existing commitments have been met we will see if these are feasible and schedule the work. **Action: Phil**

We have had an enquiry for a new connection and have been told by the subscriber that they do not have line of sight. We may review this when all other subscribers have been connected. **Action: Phil**

We have had an enquiry for two new connections in Ardaneaskan and one in North Strome. **Action: Phil**

See section 8.7 for more details on implementations

4 Secretary's report

4.1 Risk register

No progress this month.

4.2 Long term support plan

Work continues to adapt our software which will clone devices to work with the "AC Gen 2" units. Now annoying renamed in the latest firmware upgrade. **Action: Phil**

4.3 Access to the bank account

Mary and Kath have submitted a request for Mary to be given access to the bank account and are waiting for RBS to process the request. **Action: Mary & Kath**

5 Finance Director's Report

5.1 Monthly Statistics

Revenue for February

Brought forward

Balance	£1,642.01		
Creditors		£10,094.72	
Debtors		£8,998.13	
Net			£1,096.59

Bank balance

£9,931.35

This month

Income	£586.50
Expenditure	£260.65

P&L

£325.85

Creditors		£226.57	
Debtors		£116.50	
Net			£110.07

Adjusted P&L

£435.92

Carried forward

Balance	£1,967.86		
Creditors		£10,321.29	
Debtors		£9,114.63	
Net			£1,206.66

Bank balance

£10,367.27

5.2 Last year's surplus

Completed

5.3 Outstanding Expenses Claims

All expense claims are up to date.

5.4 Next year's tariff

The total number of gigabytes sold was 15,300. The break even tariff for 3 fibre lines is 137 GB per £1 and for 4 fibre lines 111 GB per £1.

We are now half way through our financial year and the projected surplus is just over £4,000. There was some debate about the best use of the money and it was decided we would strike a balance between upgrading equipment, returning some of the New Joiners Premium to subscribers, and a review of the tariff for the next financial year. All of these topics will be viewed in the light of increasing inflation and likely rising costs.

5.5 Outstanding subscribers' debt

The outstanding debt is £16. **Action Kath**

5.6 Housekeeping

Work continues to automate the reconciliation of payments; priority will be given to Zen & Plusnet. **Action: Phil**

5.7 Payments for installations of subscriber's equipment

All payments are up to date.

6 Internal auditor's report

It was agreed we would prepare a synopsis of our current practises, needs and areas of weakness to assist ourselves and the auditor. No progress this month. **Action: Phil**

6.1 Assets, bf, acquired, relinquished / written off, cf

No progress this month.

6.2 Liabilities

No progress this month.

6.3 *Description of the Audit Trail*

No progress this month.

7 **Customer Relations**

7.1 *Production Environment*

As the Achmore access point has intermittently got “out of sync” with subscribers’ antenna software was installed to constantly monitor the links and reboot the unit to reset the connections if required. This works by checking for a minimum number of subscriber’s units being “visible” to the access point. In March an unusual number of subscribers turned off their antennas which took the count below the minimum causing the unit to constantly reboot. The problem was identified and rectified within a couple of hours. **Closed**

7.1.1 *Issues raised by Subscribers*

7.1.1.1 *Fernaig*

In November one subscriber reported no internet access, their AirRouter was replaced, and subsequent testing showed the fault was with the unit’s power supply. Their new MikroTik router is reporting a suspected fault on one or more of the subscriber’s units and their router had to be configured to temporarily force the offending units offline. This has now been diagnosed as a problem caused by a subscriber purchased and installed secondary access point. To reduce the impact of the fault we have temporarily changed the configuration of their router. We have also provided diagnostics and advice as to how the problem with their kit might be resolved. We are waiting for the subscriber to confirm they have made the suggested changes. No progress since the last minutes. **Action: Subscriber**

7.1.1.2 *Achmore*

No issues

7.1.1.3 *The Glen*

No issues

7.1.1.4 *Braeintra*

One subscriber has reported poor performance in Braeintra - this is down to obstructions in the line of sight of the subscriber’s antenna. **Action: Subscriber**

One subscriber reported poor speeds and drop outs in some locations in their house. Further investigation is required.

Action: Phil

7.1.1.5 *Craig*

No issues

7.1.1.6 *Ardaneaskan East*

No issues

7.1.1.7 *Ardaneaskan West*

No issues

7.1.1.8 *Leacanashie*

No issues

7.1.1.9 *North Strome*

One subscriber is having issues preventing the installation of a whole house Wi-Fi system. **Action: Phil**

7.1.1.10 *Strome Ferry*

No issues

7.1.1.11 *Ardnarff*

No issues

7.1.2 *Usage quotas*

The monthly total for February was 7 TB The daily average was 252 GB, with a peak usage of 368 GB on Sunday 20th. CMNet peaks since operations started; highest average daily usage 282 GB, highest single days usage - 433 GB, highest monthly usage - 8.7 TB.

No one exceeded their quota.

7.1.3 *Possible virus infection*

No new instances of the Ubiquiti virus were detected; we will continue to run scans. **Action: Phil**

7.1.4 *Planned upgrades of equipment*

7.1.4.1 *Fernaig*

The access point will be upgraded and a backup installed

7.1.4.2 *Achmore*

Once or twice every few months we are still seeing sporadic problems with the Achmore access point. The access point has already been replaced with another similar unit which did not resolve the problem. The current unit will be upgraded and a backup installed. **Action: Phil**

7.1.4.3 *The Glen*

One access point will be upgraded to see if that will reduce the noise levels. No progress this month. **Action: Phil**

7.1.4.4 *Braeintra*

The access point will be upgraded and a backup installed. **Action: Phil.**

7.1.4.5 *Craig*

We are investigating a report of drop outs. We will review the situation when we have more experience of low level links over water or other options become available. **Action: Phil**

7.1.4.6 *Ardaneaskan East*

No issues

7.1.4.7 *Ardaneaskan West*

No issues

7.1.4.8 *Leacanashie*

No issues

7.1.4.9 *North Strome*

No issues

7.1.4.10 *Strome Ferry*

No issues

7.1.4.11 *Ardnarff*

No issues

7.1.5 *Backbone relays*

7.1.5.1 *Plockton*

We will check the installation and apply a second coat of paint to the school wall. **Action: Phil & Mary**

7.1.5.2 *Achmore*

The Plusnet router will be replaced with something more suitable. No progress this month. **Action: Phil**

The test the maximum speed that the radio link from Achmore Hall to Creag Mhaol will support the router in Achmore Hall will need to be upgraded. At the moment it has “only” 100 Mbps Ethernet ports and it is expected that the radio link will be able to run well over this speed. However we test the speed from router to router so the 100 Mbps port on the Achmore Hall router would be the limiting factor. We will therefore replace the router with one that can support 1 Gbps Ethernet ports; we have a suitable router “in stock”. The corresponding router on Creag Mhaol has already been upgraded. No progress this month. **Action: Phil**

7.1.5.3 *Lohcarron A*

Link capacity testing is required. **Action: Phil**

We will install a Raspberry Pi micro computer to facilitate gateway line speed tests. **Action: Phil**

7.1.5.4 *Lohcarron B*

The new line has been installed. The line needs to be tested and the link to Creag Mhaol installed and tested. **Action: Phil**

7.1.5.5 *Other relays*

The damaged Strome Low relay dish that connects to Achmore High will be recovered when we next schedule work on Creag Mhaol. **Action: Phil**

The Creag Mhaol dish that connects to Ardaneaskan West that was replaced after storm damage is showing some slight dips in signal strength. This is probably due to a damaged housing, the housing will be replaced when we next schedule work on Creag Mhaol. **Action: Phil**

7.1.6 *System monitoring servers*

The MikroTik server (“The Dude”) is having its database rebuilt - the newly installed equipment has been set up but there is still more work to do. **Action: Phil**

7.1.7 *Documentation*

Phil is part way through a document to list the options for automatic recovery of failures and loss of capacity. No progress this month. **Action: Phil**

7.1.8 *Customer Contracts*

We will check that all changes to customer contracts and charges are now correct. **Action: Phil**

7.2 *Changes for next month*

7.2.1 *Additional Management tools / reports*

Management Reporting Software upgrades. No progress this month. **Action: Phil**

Software to check the configuration of equipment - this is being upgraded to increase the automation when configuring new devices and simplify the configuration of backup units. **Action: Phil**

7.2.2 *Potential personal safety issue*

The new naming standard has been used for all the new installations. **Action: Phil**

7.2.3 *Additional equipment for subscribers*

Nothing outstanding

7.3 *Volume trial*

7.3.1 *Review of the trial*

No progress this month. **Action: Phil**

7.4 *Terms of Reference*

Deferred

7.5 *Problem reporting procedure*

A trial WhatsApp group has been set up by Mary - testing is continuing amongst directors. **Action: All**

8 *General topics*

8.1 *Documentation*

8.1.1 *Creag Mhaol*

We have received a draft lease agreement from our solicitors; we have yet to go through this in detail. We will need to reconfirm all the GPS coordinates of the relays before we can proceed; priority will be given to completing the set up of the relays on Creag Mhaol. No progress this month. **Action: Phil**

8.2 *Backbone development*

8.2.1 *New relays*

8.2.1.1 *Completed*

No progress this month.

8.2.1.2 *Next steps*

The new relay automated recovery algorithms are being tested (some rather unexpectedly)

The buried mains power cables need to be permanently marked and documented.

Action: All

8.2.1.2.1 *Portchullin (raised beach)*

The Portchullin enclosures and access points will be upgraded. **Action: Phil**

Re-align the existing Portchullin Access Point

Add an additional Portchullin Access Point

Install one subscriber's test equipment in Portchullin

8.2.1.2.2 *Reraig*

We have surveyed various locations for a relay to provide an access point for Reraig. Access will almost certainly require a much higher relay than we have built so far. We will return to the relay investigation and build once the current relays are active. **Action: Phil**

8.3 *Testing*

8.3.1 *Management & accounting software*

Nothing to report

8.4 *Restoring power to the old TV repeater*

8.4.1 *Removal of old cable*

No progress this month.

8.4.2 *Protection of cable on the hill*

All the cable on the hill has been buried but the routes still need to be marked.

8.4.3 *Backup Generator*

No progress this month.

8.5 *ISPs*

No issues

8.6 Implementations

8.6.1 Phase 3 - Relays and creation of access points for the remainder of residents and connect trial subscribers.

8.6.1.1 *Ardaneaskan East*

One installation is waiting to be scheduled. **Action: Phil, Mary & Ken**

8.6.1.2 *Strome Ferry*

Two installations are waiting to be scheduled. **Action: Phil, Mary & Neil**

8.6.1.3 *Leacanashie*

One installation is waiting to be scheduled. **Action: Phil, Mary & Ken**

8.6.1.4 *North Strome*

One installation has been completed. **Action: Phil**

8.6.1.5 *Achmore*

One installation is waiting to be scheduled. **Action: Phil**

8.6.1.6 *Portchullin*

New enclosures have been purchased to act as replacements for the corroded units. **Action: Phil**

8.6.2 Phase 4 - Further investigations / backbone development required.

8.6.2.1 *Ardaneaskan West*

8.6.2.2 *Ardnarff*

8.6.2.3 *Reraig*

8.6.2.4 *Lohcarron*

8.6.2.5 *Strathcarron*

8.7 Company Logo

No progress this month. **Action: All**

8.8 General Data Protection Regulation (Data Protection Act)

Nothing to report this month

9 Director's training session

9.1 *Configuring Ubiquiti and MikroTik equipment*

Kath was given access to "WinBox" but there was a problem testing the installation. Phil will look into the problem in advance of the next meeting. Due to a problem with Neil's PC Neil needs to have AirControl reinstalled. **Action: All**

10 Next meeting

Date of next meeting Monday 11th April 19:30.

The meeting finished at 8:50 pm