

Broadband Steering Group

Minutes of the **Meetings** held on the **2nd May 2022** and **5th May** both @ 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 March, were proposed by Mary, 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 Covid

April's meeting was delayed due to a director testing positive for COVID.

3.2 Bandwidth

Mary called Plusnet about the poor speeds and was assured that the line had now been configured correctly. Mary was also told that the fixed IP address had been configured; however we would need to reboot the Plusnet router to pick up the new definition. We subsequently went to Lochcarron; tested the line which showed a download speed over 70 Mbps - good! We then rebooted the router as requested and when we retested the speed was back down to 40 Mbps. Mary called Plusnet and they insist we perform a completely pointless test with another router. As yet we have not wasted time on this futile exercise. **Action: Phil & Mary**

3.3 False RADAR

We have had a small number of false RADAR events affecting Strome Ferry, various units had their frequencies altered and this appears to have improved the situation. We are still working on an issue on the link to the server. **Action: Phil**

3.4 Gmail

At the end of May Gmail will no longer permit the use of "less secure" sign-in technology and so all CMNet's software that sends emails has had to be updated - this has taken several days effort. **Completed**

3.5 HMRC & Companies House annual accounts submissions

Our accounts are due at the end of May and so their preparation has dominated most of the last month. Mary has called Companies House to ensure we will not have to go through the same nonsense this year as last when Companies House objected to the wording of the clauses that were generated by HMRC's software! After a few minutes looking at the accounts it became clear that one of the key totals used to make sure there had been no transposition errors was incorrect. As the error could not be found after a few minutes it was decided to organise a second meeting to continue work on the accounts. Phil subsequently found the error and corrected the accounts. At our second meeting on the 5th May we went through the annual accounts and they were agreed by everyone present.

Copies of the Income and Expenditure and Balance sheet will be distributed to along with these minutes.

3.6 Subscribers

Live subscribers	- 58
Waiting for activation	- 0
Waiting for subscriber's confirmation of details / deposits	- 0
Pending installations	- 0
Waiting for installations	- 15
Leavers since the last minutes	- 0
New joiners since the last minutes	- 0
Total	- 73

Four installations were completed this month one in Ardaneaskan East, one in Leacanashie and two in Strome Ferry.

Completed

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

Kath believes that RBS have given Mary access to the bank account; Mary to confirm that she has access. **Action: Mary**

5 Finance Director's Report

5.1 Monthly Statistics

Revenue for March

Brought forward

Balance	£1,762.92		
Creditors		£10,526.23	
Debtors		£9,114.63	
Net			£1,411.60
Bank balance			£10,367.27

This month

Income	£586.50		
Expenditure	£182.77		
P&L	£403.73		
Creditors		£70.65	
Debtors		£122.17	
Net			-£51.52
Adjusted P&L			£352.21

Carried forward

Balance	£2,166.65		
Creditors		£10,596.88	
Debtors		£9,236.80	
Net			£1,360.08
Bank balance			£10,719.48

5.2 Outstanding Expenses Claims

There are two claims due for April / May. **Action: Phil, Mary & Kath**

5.3 Next year's tariff

In March the total number of gigabytes sold was 15,000, which makes the break even tariff for 3 fibre lines 134 GB per £1 and for 4 fibre lines 109 GB per £1.

In April the total number of gigabytes sold was 15,375, which makes the break even tariff for 3 fibre lines 138 GB per £1 and for 4 fibre lines 111 GB per £1.

5.4 Outstanding subscribers' debt

The outstanding debt is £36. **Action Kath**

5.5 Housekeeping

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

5.6 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*

No issues.

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. **There has been no response from the subscriber. Closed**

No issues.

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. Tests we run with a new access point installed and this has proved satisfactory. **Completed**

There appears to have been a case of the access point losing sync with subscriber's antenna, the unit was rebooted. If this recurs we will implement the same solution that is in place for the Achmore access point until we can upgrade to the latest technology. **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*

A performance issue was reported, this was due to a frequency conflict. Some adjustments were made to frequencies and the problem was resolved. **Completed**

7.1.2 *Usage quotas*

The monthly total for March was 6.9 TB The daily average was 222 GB, with a peak usage of 358 GB on Saturday 16th. No one exceeded their quota in March.

The monthly total for April was 7.6 TB The daily average was 252 GB, with a peak usage of 395 GB on Saturday 30th. CMNet peaks since operations started; highest average daily usage 282 GB, highest single days usage - 433 GB, highest monthly usage - 8.7 TB.

Two subscribers exceeded their quota in April.

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**

To 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 Lochcarron 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 Lochcarron B

The new line has been installed. Initial tests showed very poor speeds of less than 40 Mbps, Plusnet then made some changes and the speed improved to 70+ Mbps. However on rebooting the unit to pick up a fixed IP address the speed reverted to under 40 Mbps. Plusnet now want us to test the line with a different router. The link to Creag Mhaol can then be 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**

The access point for the server failed and was replaced. **Completed**

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 has been completed.

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

8.6.1.2 Strome Ferry

Two installations have been completed.

8.6.1.3 Leacanashie

One installation has been completed.

8.6.1.4 North Strome

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

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 Lochcarron

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

10 Next meeting

Date of next meeting Monday 27th June 19:30.

The meeting on the 2nd May finished at 9:00 pm

The meeting on the 5th May also finished at 9:00 pm