

Broadband Steering Group

Minutes of the Meeting held on the 19th August 2024 @ 8:20 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 July were proposed by Kath, seconded by Mary.

Copies of previous minutes are on our website at:-

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

3 Chairman's report

Another month avoiding the rain

3.1 Bandwidth

The Plockton gateway is still offline; we now have a clone ready to install which has been configured to the same standard as Lochcarron and Achmore. Our systems software has been updated to allow the "edge" routers (i.e. those interfacing directly to the internet) to be configured automatically. All the three gateways are complete and the software is near the end of the systems testing. We will schedule a visit to replace reconfigured Plockton hardware.

Action: Phil

Since the last report there have been no more failures of the Lochcarron line recorded in our monitoring software.

However we have seen both the lines in Achmore and also the Plockton line lose their connections, all the lines had to be manually reset to restore the connections. All the equipment in Achmore Hall was reset maybe due to a brief power outage affecting just the Hall.

It has become apparent that some of the additional emails produced by the system which are reporting backbone equipment internet usage higher than expected are due to the use of the VPN. In due course our software will be amended to disregard VPN traffic as this distorts the logs. **Action: Phil**

3.2 False RADAR

There were 11 false RADAR events recorded since the last progress report. Again the highest number was on the link between Strome High and Strome Low relays.

The Strome High and Low link is scheduled to be replaced by the new 60 GHz radios which will eliminate the FR events.

This upgrade will also free up more frequencies in the 5 GHz range which will give us more choice for the remaining 5 GHz radios. Most of the access points on Creag Mhaol are scheduled to be upgraded to units which will automatically map frequency channels to help better manage our frequency usage. **Action: Phil**

3.3 Subscribers

Live subscribers	- 70
Waiting for activation	- 0
Waiting for subscriber's confirmation of details / deposits	- 0
Pending installations	- 0
Waiting for installations	- 12
Leavers since the last minutes	- 0
New joiners since the last minutes	- 0
Total	- 82

No new installations this month and no more are scheduled for the moment. We will now concentrate on maintenance tasks on Creag Mhaol to upgrade equipment - if it ever stops raining.

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**

3.4 ISPs

Nothing to report

4 Secretary's report

4.1 Risk register

No progress this month.

4.2 Long term support plan

We have adapted our software to allow the automatic cloning of subscribers' routers, subscribers' antenna, subscribers' access points and backbone access points. The changes to add Edge routers are being tested now. **Action: Phil**

In due course we will look for volunteers at "remote" sites who can hold and configure spare equipment. **Action: Phil**

4.3 *Broadband in Achmore Hall*

The Hall router will be switched for an AirRouter so that the hall committee can take control of the WiFi password.

Action: Phil

5 Finance Director's Report

Revenue for July

Brought forward

Balance	£1,828.29		
Creditors		£2,039.07	
Debtors		£2,070.57	
Net			-£31.50
Bank balance			£9,713.86

This month

Income	£663.08		
Expenditure	£139.91		
P&L	£523.17		
Creditors		£256.03	
Debtors		£112.80	
Net			£143.23
Adjusted P&L			£666.40

Carried forward

Balance	£2,351.46		
Creditors		£2,295.10	
Debtors		£2,183.37	
Net			£111.73
Bank balance			£10,380.26

5.1 *Possible Attempted Fraud*

There was a second attempt to pay a Santander bill but this was intercepted by RBS and not deducted from our account.

We await the results of the investigation by RBS.

5.2 *Outstanding Expenses Claims*

No claims are outstanding.

5.3 *Next year's tariff*

The total number of bytes sold was 28,800 GB; which makes the break-even tariff for 4 fibre lines 207 GB per £1 and for 5 fibre lines 166 GB per £1.

This year we expect to make a surplus of ~ £2,900.

Prior to the meeting Phil circulated a price list for all the equipment we discussed at the last meeting - after some discussion it was decided we would buy the following:-

A mini PC to replace the ageing laptop that acts as a sever

Aluminium sheet to make a trial temporary cover for the rusting enclosures

Five stainless steel enclosures as permanent replacements for the rusting boxes

The above plus some sundries, cables, paper etc will come to about £2,000 leaving ~ £900. This is the equivalent of last year's loss and we should therefore have a small tax bill this year. **Action: Phil**

5.4 *Outstanding subscribers' debt*

Two accounts are in debit the subscribers have been informed. **Action: Kath**

5.5 *Housekeeping*

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

5.6 *Payments for installations of subscriber's equipment*

All payments are up to date.

5.7 *Subscriber Payment Errors*

Nothing to report

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*

7.1.1 Issues raised by Subscribers

7.1.1.1 *How can subscribers contact CMNet when the internet is down?*

We will investigate the options; ideally the CMNet support team needs to receive problem reports via email. No progress this month. **Action: All**

Phil's proposal to formalise subscribers' problem reports is being held back for the moment pending our investigations regarding sending emails when the network is down. **Action: Phil**

7.1.1.2 *Strome High Relay*

No issues

7.1.1.3 *Fernaig*

No issues

7.1.1.4 *Achmore*

Our systems software is showing one subscriber's AirRouter is offline, this is being investigated. **Action Neil & Kath**

7.1.1.5 *The Glen*

No issues

7.1.1.6 *Braeintra*

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

One subscriber reported drop outs when using secondary access points. The mains LAN extenders have been replaced and we will review the situation when we have a few weeks' data. **Action: Subscriber, Phil**

7.1.1.7 *Craig*

We have asked a subscriber to check the line of sight for obstructions. **Action: Subscriber**

7.1.1.8 *Ardaneaskan East*

No issues

7.1.1.9 *Ardaneaskan West*

No issues

7.1.1.10 *Leacanashie*

No issues

7.1.1.11 *North Strome*

The primary North Strome access point based on Creag Mhaol failed and will be replaced. **Action: Phil**

7.1.1.12 *Strome Ferry*

No issues

7.1.1.13 *Ardnarff*

Poor speeds between buildings have been traced to mains LAN extenders not connecting properly probably caused by "noise" on the mains power these will be replaced with radios to link the buildings. We delivered another bracket and fitting for the subscriber to install. **Action: Subscriber**

7.1.2 Usage quotas

The monthly total for June was 12.6 TB (new record), the daily average was 406 GB (new record), with a peak usage of 545 GB on Monday 29th.

CMNet peaks since operations started; highest average daily usage 406 GB, highest single days usage - 708 GB, highest monthly usage - 12.6 TB.

No one exceeded their quota in July.

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 configured and installed now we have received stocks from our suppliers. **Action: Phil**

7.1.4.2 Achmore

The access point will be configured and installed now we have received stocks from our suppliers. **Action: Phil**

7.1.4.3 The Glen

A new unit has been configured to replace the dish on Creag Mhaol; it and a backup will be installed when weather permits. **Action: Phil.**

7.1.4.4 Braeintra

The access point will be configured and installed now we have received stocks from our suppliers. **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

The access point will be configured and installed now we have received stocks from our suppliers. **Action: Phil**

7.1.4.7 Ardaneaskan West

No issues

7.1.4.8 Leacanashie

The access point will be configured and installed now we have received stocks from our suppliers. **Action: Phil**

7.1.4.9 North Strome

The access point will be configured and installed now we have received stocks from our suppliers. **Action: Phil**

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**

After the recent outage we will reconfigure and replace the hardware. **Action: Phil & Mary**

7.1.5.2 Achmore

The 60 GHz dish mount will be upgraded. **Action: Phil**

An operating system upgrade to the Raspberry Pi corrupted the micro SD card, the unit has been recovered the operating systems upgrade has been installed and the unit is being configured so it can be replaced. It turns out that the new OS is not compatible with Remote Desktop and so the OS will have to be downgraded to an earlier version **Action: Phil**

After Jackie consulted the heating contractor it was decided that a better position for the new tank would be outside the “old boiler room”. This means CMNet’s equipment can remain in its current position. **Completed**

7.1.5.3 Lochcarron

No issues.

7.1.5.4 Other relays

No issues.

7.1.6 System monitoring servers

The MikroTik server (“The Dude”) is having its database rebuilt (again!) - The newly installed equipment has been set up but there is still more work to do. The schedule to backup the logs has been altered to keep several days worth of data.

Action: Phil

In the long term AirControl will be replaced by the new Ubiquiti monitoring software. **Action: Phil**

The AirControl database has grown too large for the server PC and is being cleaned up to free up disk space. **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

One contract is outstanding; we have chased the relevant subscriber. **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**

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 to report

7.3 *Volume trial*

7.3.1 *Review of the trial*

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

7.4 *Terms of Reference*

Deferred

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 will be upgraded. **Action: Phil**

Re-align the existing Portchullin Access Point

Install test equipment in Portchullin

8.2.1.2.2 *Reraig*

We are waiting for a subscriber to provide details of the land they own so we can determine where to install their relay.

Action: Subscriber

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*

Nothing to report

8.6 *Implementations*

8.6.1 *Phase 3*

8.6.1.1 *Ardaneaskan East*

All installations have been completed.

8.6.1.2 *Ardnarff*

One installation needs to be upgraded. **Action: Subscriber**

8.6.1.3 *Strome Ferry*

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

8.6.1.4 *North Strome*

All installations have been completed.

8.6.1.5 *Achmore*

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

8.6.1.6 *Portchullin*

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

8.6.1.7 *Craig*

All installations have been completed.

8.6.1.8 *Leacanashie*

All installations have been completed.

8.6.2 *Phase 4 - Further investigations / backbone development required.*

8.6.2.1 *Ardaneaskan West*

8.6.2.2 *Reraig*

8.6.2.3 *Lochcarron*

8.6.2.4 *Strathcarron*

8.6.2.5 *Balnacra*

8.7 *Company Logo*

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

8.8 *General Data Protection Regulation (Data Protection Act)*

Nothing to report

9 **Director's training session**

9.1 *Configuring Ubiquiti and MikroTik equipment*

Refresher training will be scheduled as required.

10 **AoB**

There was a discussion about the content of the Lochalsh Local Place Plan. Mary explained that although she will continue to attend the Lochalsh Collaboration meetings in future her input will relate to matters affecting CMNet as she is no longer a member of the CC.

It was unanimously agreed that CMNet would like see to fibre connections to the premises as one of the key targets.

11 **Next meeting**

Monday 23rd September at 7:30 pm

The meeting finished at 9:30 pm