

Broadband Steering Group

Minutes of the Meeting held on the 17th July 2023 @ 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 June 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 Bandwidth

Performance statistics from the various links are proving rather difficult to interpret. The stats suggest that using queues to manage capacity does not appear to work as described in the documentation. A considerable amount of time has been spent reducing the amount of information coming from the system in the hope that things will become clearer. **Action: Phil**

3.2 False RADAR

We have purchased the materials to make a more robust mount on the Hall and to fabricate an intermediate mount that will allow us to make micro adjustments to the dish alignment. **Action: Phil**

Analysis of the configuration of the new 60 GHz units shows that they have many new parameters. This now takes us over a couple of dozen different pro forma to use for the different combinations of hardware and the way it is used.

There are currently around 200 devices each with unique configurations which need to be kept up to date. It has therefore been decided it is time to change the way we set up and verify configurations to identify common parameters to reduce the duplication and make future enhancements simpler. **Action: Phil**

There have been a few of false RADAR events in the last month; it is now clear that two units have more events than the rest combined. Once we have gathered enough data we will try switching the units to alternate frequencies. Where it is possible we will upgrade the vital links (e.g. relay to relay) to 60 GHz to eliminate the FR events. **Action: Phil**

3.3 Subscribers

Live subscribers	- 63
Waiting for activation	- 0
Waiting for subscriber's confirmation of details / deposits	- 0
Pending installations	- 0
Waiting for installations	- 8
Leavers since the last minutes	- 0
New joiners since the last minutes	- 0
Leavers since the last minutes	- 0
New joiners since the last minutes	- 0
Total	- 71

No new installations were completed this month.

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 request to provide a 4G service to boost mobile coverage; once our existing commitments have been met we will see if this is feasible and schedule the work. **Action: Phil**

3.4 New equipment

The new support laptop has been updated to monitor the new 60 GHz devices.

More work is required to the email client to filter incoming messages. (CMNet's monitoring software can produce over 200 emails a day.) No progress this month. **Action: Phil**

We will also add our monitoring software so it can be used as a backup for the server should that fail. No progress this month. **Action: Phil**

We are still waiting for one item outstanding item to be delivered. **Action: Phil**

4 Secretary's report

4.1 Risk register

No progress this month.

4.2 Long term support plan

We have adapted our software to work with the “AC Gen 2” units; we are looking at options to clone replacements devices remotely and in due course will look for volunteers at “remote” sites to hold spares. **Action: Phil**

4.3 Broadband in Achmore Hall

We will meet with the Hall committee to define their requirements. **Action: Neil**

4.4 Electricity price increases

In the light of the recent increases in electricity charges it was decided to review the amounts paid for hosting relays and to increase payments. **Action: Phil**

4.5 Zen / Plusnet price increases

As our Plusnet contract will soon come to an end we will review the value for money of all ISPs. Now we have an ultra high speed link to Achmore Hall other options become available for capacity increases and any new contracts will take into account our options for long term upgrades. **Action: Mary**

5 Finance Director's Report

5.1 Monthly Statistics

Revenue for June

Brought forward

Balance	-£173.36		
Creditors		£19,263.42	
Debtors		£18,732.22	
Net			£531.20

Bank balance **£8,105.81**

This month

Income	£608.50		
Expenditure	£167.16		
P&L	£441.34		
Creditors		£1.00	
Debtors		£84.50	
Net			-£83.50

Adjusted P&L **£357.84**

Carried forward

Balance	£267.98		
Creditors		£19,264.42	
Debtors		£18,816.72	
Net			£447.70

Bank balance **£8,463.65**

5.2 Outstanding Expenses Claims

All claims are up to date.

5.3 Last year's surplus

There is one NJP rebate cheque that has not yet been cashed. **Action: Subscriber**

5.4 Next year's tariff

The first of the pending ISP price increases has been factored into the following figures which mean that the break even quota has gone down even though the number of gigabytes sold has increased this month.

The total number of gigabytes sold was 24,150, which makes the break even tariff for 3 fibre lines 204 GB per £1 and for 4 fibre lines 165 GB per £1.

5.5 Outstanding subscribers' debt

Two accounts are in arrears. **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*

No problems this month.

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 so our initial investigations will be whether voice mails can be forwarded via email. No progress this month.

7.1.1.2 *Fernaig*

No issues

7.1.1.3 *Achmore*

No issues

7.1.1.4 *The Glen*

No issues

7.1.1.5 *Braeintra*

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

7.1.1.6 *Craig*

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

7.1.1.7 *Ardaneaskan East*

No issues

7.1.1.8 *Ardaneaskan West*

No issues

7.1.1.9 *Leacanashie*

No issues

7.1.1.10 *North Strome*

One subscriber is having issues preventing the installation of a whole house Wi-Fi system. We paid a visit and ran scans of Wi-Fi signal strength at various locations and looked at various options. Phil will set up and test a Wi-Fi repeater as one of the options. **Action: Phil**

7.1.1.11 *Strome Ferry*

No issues

7.1.1.12 *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 May was 9.1 TB, the daily average was 302 GB, with a peak usage of 406 GB on Saturday 17th. CMNet peaks since operations started; highest average daily usage 345 GB, highest single days usage - 708 GB, highest monthly usage - 10.7 TB.

One subscriber exceeded their quota in June.

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**

7.1.5.2 Achmore

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

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

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. It appears that when the system is backed up the logs are cleared down thus making it difficult to trace yesterday's problems. We will investigate backing up the logs!! **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

Some contracts are outstanding, we will chase subscribers. **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 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*

No issues

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.

The problem with the specific software package has now been resolved. No changes were required to and CMNet configurations. **Resolved**

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.

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

8.6.2.1 *Ardaneaskan West*

8.6.2.2 *Reraig*

8.6.2.3 *Lohcarron*

8.6.2.4 *Strathcarron*

8.7 *Company Logo*

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

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

We will review our GDPR policy. **Action: Mary**

9 **Director's training session**

9.1 *Configuring Ubiquiti and MikroTik equipment*

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

10 **AoB**

11 **Next meeting**

Monday 21st August

The meeting finished at 9:00 pm