

Broadband Steering Group

Minutes of the Meeting held on the 17th June 2024 @ 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 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

In the past month lots of time was spent preparing for and implementing equipment software upgrades. Not helped by the last MikroTik RouterOS upgrade corrupting the time zones...

Because of this there was no progress this month rationalising all the different Pro Formas. **Action: Phil**

3.1 Ken Hopper

As reported in several previous minutes we have recognised the contribution that Ken Hopper has made to help with installations on the North side of loch Carron. Ken's efforts have saved CMNet many days of work. Some time ago we decided that we should give Ken something to show our thanks and recently Mary was able to find something appropriate which has been dispatched to Ken.

Once more we would like to thank Ken for all the help he has given us over the years.

3.2 Bandwidth

The new Zen line in Achmore was brought into service sooner than planned due to the failure of the Plockton connection.

At first this looked like a hardware failure of the Plockton "modem" but the connection spontaneously restored itself after several days and has been working without interruption since then? We will take the opportunity to bring the Plockton configuration up to the same standard as Lochcarron and Achmore and schedule a visit to replace the hardware. **Action: Phil**

There have been a few failures of the Lochcarron line recorded in our monitoring software each for a few minutes; however none have lasted long enough for us to analyse the fault so for the moment we believe they are down to Openreach.

Work continues to reduce the number of emails produced by the system. **Action: Phil**

3.3 False RADAR

There were 6 false RADAR events recorded since the last progress report. Again the highest number where 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 usage to help better manage our frequency usage. **Action: Phil**

3.4 Subscribers

Live subscribers	- 69
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	- 1
Total	- 82

Three new installations were completed this month.

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

3.5 New equipment

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

3.6 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 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

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 May

Brought forward

Balance	£2,423.95		
Creditors		£1,958.91	
Debtors		£1,664.77	
Net			£294.14

Bank balance

£10,635.16

This month

Income	£580.20		
Expenditure	£1,022.15		
P&L	-£441.95		
Creditors		£16.50	
Debtors		£167.07	
Net			£150.57

Adjusted P&L

-£592.52

Carried forward

Balance	£1,982.00		
Creditors		£1,975.41	
Debtors		£1,831.84	
Net			£143.57

Bank balance

£10,042.64

Outstanding Expenses Claims

All claims are up to date.

5.1 Next year's tariff

The total number of gigabytes sold was 26,850, which makes the break even tariff for 4 fibre lines 192 GB per £1 and for 5 fibre lines 154 GB per £1.

5.2 Outstanding subscribers' debt

All accounts are up to date.

5.3 Housekeeping

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

5.4 Payments for installations of subscriber's equipment

All payments are up to date.

5.5 Subscriber Payment Errors

Cheques have been written and will be dispatched to repay subscribers' overpayments. **Action: Phil**

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*

There was a power cut on the 4th June from 1pm for an hour.

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. Now Openreach have separated voice and data for their installations a voicemail forwarded via email is less attractive. We have tested sending emails via text messages from mobile phones with mixed results. Some phone and network combinations work, some don't. We have therefore decided to look for an alternative solution. **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*

No issues

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 has reported drop outs and poor performance - this is down to obstructions in the line of sight of the subscriber's antenna. We will relocate their external antenna to restore a clear line of sight. **Action: Phil**

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 May was 9.9 TB, the daily average was 320 GB, with a peak usage of 405 GB on Sunday 5th. CMNet peaks since operations started; highest average daily usage 367 GB, highest single days usage - 708 GB, highest monthly usage - 11.4 TB.

Nobody exceeded their quota in May.

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**

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**

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

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

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 *Lohcarron*

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**

Nothing to report

11 **Next meeting**

Monday 15th July at 7:30 pm

The meeting finished at 8:45 pm