

Broadband Steering Group

Minutes of the Meeting held on the 15th January 2024 @ 7:30 pm at Fernaig House

1 Present and Apologies

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

Due to the snow the meeting was held via zoom and so the production of the cheques mentioned below will be delayed.

2 Approve and adopt previous minutes

The previous minutes for November were proposed by Neil, seconded by Kath.

Copies of previous minutes are on our website at:-

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

3 Chairman's report

Work continues to rationalise all the different Pro Formas. **Action: Phil**

3.1 Bandwidth

Work continues to reduce the number of emails produced by the system, there is still more work to do to process the information. **Action: Phil**

3.2 False RADAR

There were 46 false RADAR events recorded since the last meeting. These affected a range of devices the majority have again been on the link between Strome High and Strome Low relays but the link to Ardaneaskan East and Ardaneaskan West has also appeared several times; there is no obvious explanation for this increase. We have also recorded a few instances where the Strome High and Low link has lost its connection - possibly for reasons other than RADAR, this link will be reconfigured to detect a loss of connection and automatically reboot the devices. This link is scheduled to be replaced by the new 60 GHz radios which will eliminate the FR events. **Action: Phil**

3.3 Subscribers

Live subscribers	- 64
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	- 76

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**

3.4 New equipment

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**

3.5 ISPs

We have been informed by Plusnet that they will no longer supply a business connection and we will have to move to another provider. We discussed various options to remove the Plusnet lines. After some debate we decided the best approach would be to install an additional line in Achmore Hall taking us to four internet connections, then to switch Lochcarron to a new provider and once both these were in place and working to decide whether to cancel the Achmore Hall Plusnet line taking us back to three lines or to switch this line to a new ISP and so remain with four lines.

Although this approach will be more expensive as we will have to pay for a new line to be installed we decided that the risk of a straight transfer from one ISP to another was too great. Should there be problems with the transfer speeds would be affected by the loss of one of the existing lines. There was also some debate as to whether we should now increase capacity to a fourth line as our monitoring of the Lochcarron line is showing that it is close to maximum utilisation at peak times of the day, Phil will provide more stats. Although we are happy with the Zen line it was decided that we should see if we can find other ISPs to provide additional resilience rather than switch all our lines to Zen. **Action: Phil, Mary**

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 are still waiting for the Hall committee to test and sign off the installation. **Action: Hall committee**

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**

5 Finance Director's Report

5.1 Monthly Statistics

Revenue for November

Brought forward

Balance		£678.95			
Creditors			£1,127.54		
Debtors			£1,162.40		
Net				-£34.86	
Bank balance					£8,561.16

This month

Income	£600.50				
Expenditure	£116.87				
P&L		£483.63			
Creditors			£168.86		
Debtors			£63.00		
Net				£105.86	
Adjusted P&L					£589.49

Carried forward

Balance		£1,162.58			
Creditors			£1,296.40		
Debtors			£1,225.40		
Net				£71.00	
Bank balance					£9,150.65

Revenue for December

Brought forward

Balance		£1,162.58			
Creditors			£1,296.40		
Debtors			£1,225.40		
Net				£71.00	
Bank balance					£9,150.65

This month

Income	£601.50				
Expenditure	£133.04				
P&L		£468.46			
Creditors			£49.72		
Debtors			£21.50		
Net				£28.22	
Adjusted P&L					£496.68

Carried forward

Balance		£1,631.04			
Creditors			£1,346.12		
Debtors			£1,246.90		
Net				£99.22	
Bank balance					£9,647.33

November marks the end of our first quarter and the projected balance for the year (from December's figures) is a surplus of ~£4,400.

Outstanding Expenses Claims

All claims are up to date.

5.2 Last year's surplus

As the one outstanding NJP rebate cheque has expired it will be treated as a donation unless the subscriber asks for a new cheque to be issued. **Completed**

5.3 Next year's tariff

The total number of gigabytes sold was 25,650, which makes the break even tariff for 3 fibre lines 214 GB per £1 and for 4 fibre lines 160 GB per £1. Revised figures are based on an expected charge of £40 per line per month.

5.4 Outstanding subscribers' debt

All accounts are up to date.

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.

5.7 Subscriber Payment Errors

Now their monthly payments have been corrected a cheque will be issued to repay a subscribers surplus. **Action: Kath**

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

There was some debate about formalising subscribers' problem reports as on occasion there can be quite a dialogue before the issue is properly defined. It was decided that we should produce a checklist to be sent to all subscribers to be used prior to reporting problems. Phil will circulate a proposal. **Action: Phil**

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 Braeindra

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**

7.1.1.6 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 propose to replace the mains LAN extenders with an Ethernet cable. **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 November was 9.7 TB, the daily average was 322 GB, with a peak usage of 411 GB on Friday 3rd. The monthly total for December was 9.5 TB, the daily average was 307 GB, with a peak usage of 569 GB on Wednesday 27th.

CMNet peaks since operations started; highest average daily usage 367 GB, highest single days usage - 708 GB, highest monthly usage - 11.4 TB.

No one exceeded their quota in November.

One subscriber exceeded their quota in December.

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**

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. **Action: Phil**

7.1.5.3 *Lohcarron*

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

The AirControl server shut itself down in December when Phil was away, when Phil returned he turned it back on again?

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 will chase 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**

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*

In the New Year we will look for an alternative to Plusnet as they no longer supply business broadband.

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*

Two installations are waiting to be scheduled. **Action: Phil**

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)*

Mary has reviewed our GDPR policy document; one small update is required. **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 19th February

The meeting finished at 8:15 pm