

Broadband Steering Group

Minutes of the Meeting held on the 22nd August 2022 @ 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 July, were proposed by Neil, 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

3.1 Bandwidth

The new dish was installed at the Lochcarron Shinty club, a visit was then required to the top of Creag Mhaol to realign the dish, followed by another trip to Lochcarron to realign that dish once more. Ardaneaskan East (and Phil & Mary) are now using the new line which is working well, although we have received a report of a problem in Ardaneaskan East which may be related to the new line - not yet investigated. We will now move subscribers from the existing gateways to balance the load through all three gateways. **Action: Phil**

3.2 False RADAR

Our new software to log false RADAR events by access point is now live and we are starting to build up a picture of the units that need attention and also those that are not experiencing any false RADAR events. **Action: Phil**

3.3 Spurious Addresses

Further investigation is required. **Action: Phil**

3.4 Subscribers

Live subscribers	- 56
Waiting for activation	- 0
Waiting for subscriber's confirmation of details / deposits	- 0
Pending installations	- 0
Waiting for installations	- 14
Leavers since the last minutes	- 2
New joiners since the last minutes	- 0
Total	- 70

No new installations this month.

One subscriber (with two connections) has left complaining about changes to their contract due to the NJP rebate. It was pointed out to them that there is in fact no change to their contract. However it is a condition of receiving the £60 (2 * £30) NJP rebate that they remain a subscriber until the end of CMNet's next financial year. As long as they are happy to forfeit their NJP rebate their contract end date is not affected. Apparently they are unhappy paying the equivalent of £3.50 a month for their broadband and prefer to go elsewhere.

There was some debate about the best order to tackle the next set of installations and it was agreed that we would process subscribers in North Strome, Ardaneaskan, Strome Ferry, Ardnarff and then Portchullin. Once these are complete and the load balanced on the gateways we will start work on the next batch of installations.

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**

See section 8.6 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. Our software has been updated to compare individual parameters across different hardware groups to produce the most robust configuration.

Action: Phil

4.3 Access to the bank account

Mary & Neil have completed yet another form to satisfy RBS and are awaiting the result. **Action: RBS / Mary**

4.4 Broadband in Achmore Hall

We discussed how to provide a broadband service in a public space and specifically for Achmore Hall. We will produce a pro forma contract to use as a basis to discuss the topic further with the hall committee. **Action: All**

The key points we discussed are:-

The connection must be secure i.e. it will not be open for all to use without the hall's permission

CMNet will provide a connection on the same financial terms as any other subscriber however we will waive the NJP charge as we already have the basis of an installation in the hall.

The broadband service can only be provided as part of the hall rental for some other function. I.e. the hall must not sell a standalone broadband service.

The hall must keep records of who has been given access.

5 Finance Director's Report

5.1 Monthly Statistics

Revenue for July

Brought forward

Balance	£3,672.64			
Creditors		£10,706.57		
Debtors		£9,648.48		
Net			£1,058.09	
Bank balance				£11,923.48

This month

Income	£748.00			
Expenditure	£536.60			

P&L **£211.40**

Creditors		£280.40		
Debtors		£140.84		
Net			£139.56	

Adjusted P&L **£350.96**

Carried forward

Balance	£3,884.04			
Creditors		£10,986.97		
Debtors		£9,789.32		
Net			£1,197.65	
Bank balance				£12,274.44

5.2 Outstanding Expenses Claims

One claim is outstanding from Mary to cover this year's Companies House return. **Action Mary**

5.3 This year's surplus

We will start the refund of the NJP at September's meeting. If subscribers' monthly payments are not correct we will defer the refund until their monthly payments have been adjusted. As this is a labour intensive task we may limit the number of cheques issued to allow time for other tasks,

Phil presented a list of kit to be purchased with justifications after some discussion and adjustments a final list was agreed. The actual order will be subject to availability as suppliers' stocks are limited.

5.4 Next year's tariff

The total number of gigabytes sold was 16,875, which makes the break even tariff for 3 fibre lines 151 GB per £1 and for 4 fibre lines 122 GB per £1.

The new tariff rate of £1 per 150 GB will come into effect on the 1st September.

5.5 Outstanding subscribers' debt

All payments are up to date. **Action All**

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*

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.

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 in Braeintra - this is down to obstructions in the line of sight of the subscriber's antenna. **Action: Subscriber**

7.1.1.6 *Craig*

No issues

7.1.1.7 *Ardaneaskan East*

One subscriber has reported problems using a Sky Box - not yet investigated. **Action: Phil**

7.1.1.8 *Ardaneaskan West*

One subscriber reported intermittent loss of connection - their AirRouter was replaced. **Resolved**

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. **Action: Phil**

One subscriber reported a loss of service, rebooting their equipment fixed the problem. The logs showed that the access point thought the unit was connected even though it obviously wasn't. If this happens again we may change the configuration of subscriber's antenna to automatically reboot if they lose contact with their access point. **Action: Phil**

One subscriber reported problems when visitors were logging into their router, this was a problem with extraneous non display characters at the end of the password. **Resolved**

All subscribers were offline for a brief period as one of the routers on Creag Mhaol was rebooted (reason unknown). As we are tracing false RADAR events at the moment the automatic recovery has been suspended and so the unit had to be manually configured. For the moment the unit has been changed so this configuration will be used as the default until we are happy that we have done all we can to isolate false RADAR events. **Action: Phil**

7.1.1.11 *Strome Ferry*

One subscriber reported a loss of service; this was traced to an unauthorised intervention by their cat. **Resolved**

One subscriber reported a series of service outages; after replacing internal routers, external antennas and remaking both Ethernet terminations we believe the problem has been resolved. It would appear that the cable testers we use are not 100% reliable - we will investigate more sophisticated cable testers. **Action: Phil**

7.1.1.12 *Ardnarff*

No issues

7.1.2 Usage quotas

The monthly total for July was 7.2 TB, the daily average was 231 GB, with a peak usage of 305 GB on Friday 1st.

CMNet peaks since operations started; highest average daily usage 282 GB, highest single days usage - 433 GB, highest monthly usage - 8.7 TB.

Three subscribers 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 upgraded and a backup installed. **Action: Phil.**

7.1.4.2 Achmore

The access point 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. **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

One subscriber has had two additional access points installed.

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

Due to the geographical separation it is not possible to connect Lochcarron A and Lochcarron B to Creag Mhaol using the same dish on Creag Mhaol. It was therefore decided to cancel the broadband line at Lochcarron A. For the moment we will continue with the installation as there may be an Openreach upgrade making it suitable for increased capacity.

Action: Mary

7.1.5.4 Lochcarron B

The new line is slowly having its load increased under systems test and so far is performing well. **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**

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 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

7.5 Problem reporting procedure

A trial WhatsApp group has been set up by Mary - it has proved very useful for communications amongst directors but is not considered suitable for subscribers' problem reporting for which we will need a more generic solution.

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 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

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

8.6.1.2 Strome Ferry

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

8.6.1.3 North Strome

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

8.6.1.4 Achmore

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

8.6.1.5 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

A survey has been completed and the subscriber has been informed of the options. **Action: Subscriber**

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

9 Director's training session

9.1 Configuring Ubiquiti and MikroTik equipment

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

10 Next meeting

Date of next meeting Monday 19th September 19:30.

The meeting finished at 9:05 pm