

Broadband Steering Group

Minutes of the Meeting held on the 7th February 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 January, 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

Thanks to all CMNet's subscribers who have adjusted their payments, all subscribers' payments are now correct.

3.1 Bandwidth

Although January was another very busy month there were no capacity issues.

New location at the Lochcarron Shinty Club - Mary organised a visit to discuss in detail the location of our equipment with George Hendry and a suitable location was agreed. Mary therefore ordered a new broadband connection through Plusnet. We subsequently met with the Openreach engineer who located the existing cables. The location of the new cable run was agreed with George. We would like to express our thanks to George for giving up his time to come over to the Shinty Club at very short notice. We are now ready to install our equipment and its enclosure. **Action: All**

We detected a drop in performance on the Lochcarron line. This was reported to Zen who sent out an engineer the next day, a faulty connection was repaired and the line is now working at normal capacity. As the Lochcarron line is now performing satisfactorily it was decided to proceed with two new connections in Strome Ferry. We will carefully monitor capacity before committing to further installations until the new capacity in Lochcarron is online. If necessary installations would be paused pending the new capacity coming into service. **Action: Phil**

3.2 False RADAR

The false RADAR summary is automatically checking and rebooting units overnight to reset their frequency if required.

We will investigate whether it can also be adapted to provide a "health check" to test that all access points are operational. We will investigate enhancing our software to scan and report on third party access points. **Action: Phil**

Most access points have a false RADAR event less than once a month; some have only had a few events since they were installed several years ago. But some can go through periods with several events a week. Investigating the units with the highest number of events will be given priority. **Action: Phil**

3.3 Subscribers

Live subscribers	- 53
Waiting for installations / activation	- 0
Waiting for subscriber's confirmation of details / deposits	- 2
Pending installations	- 3
Waiting for installations	- 12
Leavers since the last minutes	- 1
New joiners since the last minutes	- 0
Total	- 68

The current pending installations are in Ardaneaskan East, North Strome and Leacanashie. **Action: Phil**

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

We have had an enquiry for a new connection and have been told by the subscriber that they do not have line of sight. We may review this when all other subscribers have been connected. **Action: Phil**

We have had an enquiry to see if it is possible to extend CMNet to Balnacra. As this is outside the area covered by our original proposal there was some debate as to how we should manage the installations. A link to Balnacra would require a connection approximately twice as far as our current longest link so we would need to research the best equipment to use. However this distance is within the theoretical range of some Ubiquiti equipment. **Action: All**

See section 8.7 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. **Action: Phil**

4.3 Access to the bank account

Mary and Kath have submitted a request for Mary to be given access to the bank account. **Action: Mary & Kath**

5 Finance Director’s Report

5.1 Monthly Statistics

Revenue for January

Brought forward

Balance	£1,281.82		
Creditors		£10,028.22	
Debtors		£8,794.59	
Net			£1,233.63
Bank balance			£9,708.20

This month

Income	£590.74		
Expenditure	£201.55		
P&L	£389.19		
Creditors		£37.50	
Debtors		£203.54	
Net			-£166.04
Adjusted P&L			£223.15

Carried forward

Balance	£1,671.01		
Creditors		£10,065.72	
Debtors		£8,998.13	
Net			£1,067.59
Bank balance			£9,931.35

5.2 Last year’s surplus

The sixth and final batch of subscribers to receive cheques refunding a portion of the New Joiner’s Premium has been agreed and will be dispatched within the next few days. **Action: Kath, Neil, Phil & Mary**

5.3 Outstanding Expenses Claims

All expense claims are up to date.

5.4 Next year’s tariff

The total number of gigabytes sold was 15,300. The break even tariff for 3 fibre lines is 137 GB per £1 and for 4 fibre lines 111 GB per £1.

5.5 Outstanding subscribers’ debt

The outstanding debt is £16. **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

High winds, heavy rain and a series of “micro” power cuts caused some intermittent problems. The server that houses the network management software was also affected and this meant it took longer than normal to determine if all units were back online and working correctly. Thanks to those subscribers that emailed to confirm their connection was working.

7.1.1 Issues raised by Subscribers

7.1.1.1 Fernaig

In November one subscriber reported no internet access, their AirRouter was replaced, and subsequent testing showed the fault was with the unit’s power supply. Their new MikroTik router is reporting a suspected fault on one or more of the subscriber’s units and their router had to be configured to temporarily force the offending units offline. This has now been diagnosed as a problem caused by a subscriber purchased and installed secondary access point. To reduce the impact of the fault we have temporarily changed the configuration of their router. We have also provided diagnostics and advice as to how the problem with their kit might be resolved. We are waiting for the subscriber to confirm they have made the suggested changes. No progress since the last minutes. **Action: Subscriber**

One subscriber reported no internet access; this was traced to a faulty configuration on the subscriber’s laptop. **Closed**

7.1.1.2 Achmore

One subscriber reported no internet access; this was traced to their antenna which had been reset to the factory default configuration. The unit was reconfigured **Closed**

7.1.1.3 The Glen

No issues

7.1.1.4 Braeindra

One subscriber reported poor speeds and drop outs in some locations in their house. Further investigation is required.

Action: Phil

7.1.1.5 Craig

No issues

7.1.1.6 Ardaneaskan East

No issues

7.1.1.7 Ardaneaskan West

No issues

7.1.1.8 Leacanashie

No issues

7.1.1.9 North Strome

One subscriber is having issues preventing the installation of a whole house Wi-Fi system.

7.1.1.10 Strome Ferry

No issues

7.1.1.11 Ardnarff

No issues

7.1.2 Usage quotas

The monthly total for January was 8.7 TB (new record). The daily average was 282 GB, with a peak usage of 422 GB on Monday 3rd.

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

No one exceeded their quota. One subscriber has asked for their quota to be increased their contract will be amended accordingly.

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

7.1.4.2 *Achmore*

Once or twice every few months we are still seeing sporadic problems with the Achmore access point. The access point has already been replaced with another similar unit which did not resolve the problem. The current unit 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. No progress this month. **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*

No issues

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**

The 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 *Lohcarron A*

Link capacity testing is required. **Action: Phil**

We will install a Raspberry Pi micro computer to facilitate gateway line speed tests. **Action: Phil**

7.1.5.4 *Lohcarron B*

The new line has been ordered. **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 outstanding

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 - testing is continuing amongst directors. **Action: All**

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 and access points will be upgraded. **Action: Phil**

Re-align the existing Portchullin Access Point

Add an additional Portchullin Access Point

Install one subscriber's 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

One installation is pending. **Action: Phil, Mary & Ken**

8.6.1.2 Strome Ferry

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

8.6.1.3 Leacanashie

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

8.6.1.4 North Strome

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

8.6.1.5 Achmore

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

8.6.1.6 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

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 this month

9 Director's training session

9.1 Configuring Ubiquiti and MikroTik equipment

Kath was given access to the common data area on the server.

10 Next meeting

Date of next meeting Monday 14th March 19:30.

The meeting finished at 9:20 pm