

Broadband Steering Group

Minutes of the Meeting held by Microsoft Teams on the 15th September 2021 @ 7:30 pm

1 Present and Apologies

Present: Phil Game, Mary MacBeth, Kath Smith

Apologies: Neil MacRae

2 Approve and adopt previous minutes

The previous minutes for August, were proposed by Mary, 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

A considerable amount of time has been spent working on the August accounts (end of CMNet's financial year), initialising payments and contracts for new joiners and changes for the new tariff. This has impacted the time available for other tasks.

3.1 Bandwidth

There has been considerable growth in usage in August so work to prepare for increased bandwidth will be given priority.

We are investigating possibilities in Lochcarron and Achmore. **Action: Phil and Mary**

3.2 False RADAR

We continue to see frequent false RADAR events mostly on the North Strome access point and the Strome High to Strome Low link. A pattern is emerging with the North Strome events often happening between 17:00 and 18:00. The Strome Ferry "bounce" located in North Strome is not affected. We will experiment moving the North Strome Access point to another frequency, which will mean that other units will have to be reconfigured to create the frequency space.

Action: Phil

3.3 Subscribers

Live subscribers	- 53
Waiting for installations / activation	- 0
Waiting for subscriber's confirmation of details	- 0
Pending installations	- 2
Waiting for installations	- 16
Leavers since the last minutes	- 0
New joiners since the last minutes	- 0
Total	- 71

We have had requests for connections in Lochcarron, Strathcarron, North Strome and Leacanashie; 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**

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

Software to automate the cloning of failed devices - work has restarted to further automate the process and it is being tested and used on the kit being prepared for the new installations. **Action: Phil**

4.3 Access to the bank account

Mary has obtained the forms required to register her as a bank signatory; this requires that all directors formally approve a resolution to appoint Mary. As the exact wording of the resolution is key it will be done through an email meeting. No progress this month. **Action: All**

4.4 Electricity account

After considerable effort Mary has finally managed to find someone at SSE who understood the problem with our account and was able to correct the error. We have supplied SSE with meter readings and expect a high bill in October as the previous estimates were low.

Now our account has been corrected and we are on the fixed price tariff we will obtain another set of meter readings so we can accurately predict our usage and bills. **Action: Mary**

5 Finance Director's Report

5.1 Monthly Statistics

Revenue for August:-

Brought forward

Balance	£2,010.56		
Creditors		£7,156.57	
Debtors		£5,033.28	
Net			£2,123.29
Bank balance			£11,411.93

This month

Income	-£832.47		
Expenditure	£1,263.42		
P&L	-£2,095.89		
Creditors		£2,542.87	
Debtors		£85.55	
Net			£2,457.32
Adjusted P&L			£361.43

Carried forward

Balance	-£85.33		
Creditors		£9,699.44	
Debtors		£5,118.83	
Net			£4,580.61
Bank balance			£11,773.36

5.2 Last year's surplus

The first 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: Phil & Mary**
Subscribers have been notified of any account issues and cheques will not be issued until these have been resolved.

Action: Subscribers

5.3 Review of replacement equipment costs.

We have moved the new "AC" subscriber's antenna to see if we can reduce the interference from the rise and fall of tides.

Action: Phil

5.4 Outstanding Expenses Claims

All expense claims are up to date.

5.5 Next year's tariff

The total number of gigabytes sold was 13,950. The break even tariff for 3 fibre lines is 125 GB per £1 and for 4 fibre lines 101 GB per £1.

5.6 Outstanding subscribers' debt

Excluding quota increases, new joiners and rebates the total outstanding debt is £4.

5.7 Housekeeping

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

5.8 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*

We are still seeing sporadic problems with the Achmore access point. **Action: Phil**

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

Drop outs in Craig - we have not recorded any drop outs for several months; however we will continue to monitor the link. **Action: Phil**

We continue to hold the Lochcarron gateway in reserve should there be a need to increase capacity.

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**

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**

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**

7.1.1 *Usage quotas*

The monthly total for August was 6.7 TB. The daily average was 217 GB, with a peak usage of 292 GB on Saturday 14th. CMNet peaks since operations started; highest average daily usage 229 GB, highest single days usage - 367 GB, highest monthly usage - 7.1 TB.

Five subscribers exceeded their quotas in August and have had their contracts amended accordingly.

7.1.2 *Possible virus infection*

No new instances of the Ubiquiti virus were detected; we will continue to run scans. **Action: Phil**

7.1.3 *Installation of equipment*

7.1.3.1 *Achmore*

Nothing to report

7.1.3.2 *Ardaneaskan East*

Nothing to report

7.1.3.3 *Ardaneaskan West*

Nothing to report

7.1.3.4 *Ardnarff*

Nothing to report

7.1.3.5 *Braeintra*

We will configure and install backup units for the Achmore side relays as soon as time permits. **Action: Phil.**

7.1.3.6 *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**

7.1.3.7 *North Strome*

Nothing to report

7.1.3.8 *Strome Ferry*

The height of the subscriber's antenna has been increased and we are recording the results. We will then replace the access point in North Strome so an different "AC" unit can be evaluated. **Action: Phil**

7.1.3.9 *Other installations*

Nothing to report

7.1.4 *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

Ardaneaskan - One site has requested a scan / trial.

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 Existing Relays

8.2.1 Plockton

After a few weeks have elapsed we will check the installation and apply a second coat of paint to the school wall, looks like we missed the summer break. **Action: Phil & Mary**

8.2.2 Achmore

The Plusnet router will be replaced with something more suitable. **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. **Action: Phil**

8.2.3 Lochcarron

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

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

8.2.4 Other relays

No issues.

8.3 Backbone development

8.3.1 New relays

8.3.1.1 Completed

No progress this month.

8.3.1.2 Next steps

The new relay automated recovery algorithms are being tested (some rather unexpectedly)

Re-align the existing Portchullin Access Point

Add an additional Portchullin Access Point

The buried mains power cables need to be permanently marked and documented.

Install one subscriber’s test equipment in Portchullin

Install backup equipment on Achmore High and Achmore Low relays

Action: All

8.3.2 The Glen

One access point will be upgraded to see if that will reduce the noise levels. No progress this month. **Action: Phil**

8.3.3 Ardaneaskan East

Nothing to report

8.3.4 Leacanashie

Nothing to report

8.3.5 Portchullin (raised beach)

The Portchullin access points will be upgraded. **Action: Phil**

8.3.6 Craig

We will review the link when other work is complete. **Action: Phil**

8.3.7 North Strome

Nothing to report

8.3.8 Strome Ferry

Nothing to report

8.3.9 Ardnarff

Nothing to report

8.3.10 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**

8.4 Testing

8.4.1 Management & accounting software

The subscriber usage email will be enhanced to give the specific amount of data used to allow subscribers to better manage their quotas. In the light of the quota increment changing from 50 GB to 75 GB it was decided this request should be dropped. **Completed**

8.5 Restoring power to the old TV repeater

8.5.1 Removal of old cable

No progress this month.

8.5.2 Protection of cable on the hill

All the cable on the hill has been buried but the routes still need to be marked.

8.5.3 Backup Generator

No progress this month.

8.6 ISPs

No issues

8.7 Implementations

8.7.1 Phase 3 - Relays and creation of access points for the remainder of residents and connect trial subscribers.

8.7.1.1 Ardaneaskan East

Two more installations have been completed.

Equipment has been configured for two more installations which are pending. **Action: Phil, Mary & Ken**

No further installations are waiting to be scheduled.

8.7.1.2 Strome Ferry

We are experiencing some drop in throughput due to the tides. We are testing alternative equipment to determine the best combinations before commencing the full roll out of installations. **Action: Phil, Neil**

8.7.1.3 Leacanashie

One installation has been completed.

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

8.7.1.4 North Strome

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

8.7.1.5 Achmore

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

8.7.1.6 Braeintra

No further installations are waiting to be scheduled.

8.7.1.7 Portchullin

The enclosures at Portchullin have been measured so replacements can be prepared. **Action: Phil**

8.7.2 Phase 4 - Further investigations / backbone development required.

8.7.2.1 *Ardaneaskan West*

8.7.2.2 *Ardnarff*

8.7.2.3 *Reraig*

8.7.2.4 *Lohcarron*

8.7.2.5 *Strathcarron*

8.8 *Company Logo*

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

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

Nothing to report this month

9 **Director's training session**

9.1 *Configuring Ubiquiti and MikroTik equipment*

We will organise another training session for all directors

10 **Next meeting**

Date of next meeting Wednesday 13th October 19:30.

The meeting was held by Microsoft Teams video conference and finished at 19:55