Broadband Steering Group

Minutes of the Meeting held on the 20th March 2023 @ 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 updates for February 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

There have been no reports of bandwidth issues.

Our automated speed tests are indicating that there is a possible problem with the link from Creag Mhaol to Ardaneaskan west or possibly in the Ardaneaskan west relay's router. Further investigation is required. **Action: Phil**

3.2 False RADAR

The connection from Creag Mhaol to the Achmore gateway will be upgraded to 60 GHz which is not subject to FR events. We have been granted a license by Ofcom and will install the 60 GHZ link in due course. **Action: Phil**

In addition to the link to the Achmore gateway there have been a few of false RADAR events in the last month. We will extend our own software to capture and log FR events. **Action: Phil**

3.3 Subscribers

Live subscribers	- 61
Waiting for activation	- 0
Waiting for subscriber's confirmation of details / deposits	- 0
Pending installations	- 0
Waiting for installations	- 10
Leavers since the last minutes	- 0
New joiners since the last minutes	- 0
Total	**- 71**

No new installations this month,

We have been asked to connect a new subscriber in North Strome - the line of sight to our relay is being checked. **Action: Phil**

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 have purchased another twenty "AC" antennas, four 2.4 GHz access points (to simplify work on Creag Mhaol) and a support laptop. There was a debate about the best standard software to use on the laptop for a web browser etc. Phil will complete the set up of the new laptop for support with the agreed software and also add our monitoring software so it can be used as a backup for the server should that fail. **Action: Phil**

There was some debate as to whether we should continue with our original plan to buy access points or purchase alternatives as our preferred units are still out of stock at the suppliers. It was agreed we would contact suppliers to see when stocks are likely to be available and order the same units if we are likely to get them in time to install them this summer. **Action: Phil**

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 sent our response to the Hall committee who have decided they do want to proceed with a broadband installation from CMNet. Neil will be the focal point for the installation and administration of the Hall committee account. There was some discussion about the questions that CMNet needed answered to progress the installation. Neil will contact the Hall committee to organise a meeting. **Action: Neil**

4.4　Zen price increase

We will review the value for money of all ISPs when we next look to increase capacity. **Action: Mary**

4.5　Electricity price increase

Somewhat alarmingly SSE sent us a confirmation letter quoting a unit price £1 more than the amount agreed. Mary contacted SSE who confirmed this was a mistake on their part and SSE has now sent confirmation of the agreed price. The new tariff comes into effect next month so we will read all the meters at the end of March. **Action: Mary**

5　Finance Director's Report

5.1　Monthly Statistics

Revenue for February

Brought forward				
Balance		£760.93		
Creditors			£16,015.96	
Debtors			£14,299.33	
Net				£1,716.63
Bank balance				**£10,225.53**
This month				
Income	£546.50			
Expenditure	£171.42			
P&L		**£375.08**		
Creditors			£68.02	
Debtors			£732.79	
Net				-£664.77
Adjusted P&L				**-£289.69**
Carried forward				
Balance		£1,136.01		
Creditors			£16,083.98	
Debtors			£15,032.12	
Net				£1,051.86
Bank balance				**£9,935.84**

5.2　Outstanding Expenses Claims

There is an outstanding claim for ~ £1,900 for equipment purchased in March; this will increase if we can purchase the additional access points that were agreed last month. **Action: Phil**

5.3　This year's surplus

The last batch of cheques has been dispatched. We will confirm that all cheques have been cashed. **Action: Kath & Phil**

It was agreed we would spend ~ £3,000 on hardware upgrades this year. So far we have spent ~ £1,900 on a laptop, upgraded subscribers antennas and management access points to ease access on Creag Mhaol.

The remainder will go on upgraded access points if we can get them. **Action: Phil**

5.4　Next year's tariff

The total number of gigabytes sold was 22,050, which makes the break even tariff for 3 fibre lines 198 GB per £1 and for 4 fibre lines 160 GB per £1.

5.5　Outstanding subscribers' debt

Three accounts are in arrears, the subscribers have been informed. **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.

5.8   Payment for missing equipment

There was some debate about the charge to be levied for missing equipment as the unit is no longer available. It was decided it would be fair to charge for the nearest current equivalent. Phil will raise an invoice. **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

We experienced a marked drop in the signal strength on the Braeintra access point on the 17th Feb, this was probably due to storm damage from "Otto" the previous night; the affected unit was swapped out and the backup unit brought online.

There was a power cut in Achmore on Sunday 12th March, most units came back online automatically. However the North Strome access point did not come back online correctly due to a configuration error and required manual intervention.

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.

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

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. **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. **Action: Phil / Subscriber**

7.1.2   Usage quotas

The monthly total for February was 8 TB, the daily average was 285 GB, with a peak usage of 457 GB on Wednesday 22nd.

CMNet peaks since operations started; highest average daily usage 345 GB, highest single days usage - 708 GB, highest monthly usage - 10.7 TB.

One subscriber exceeded their quota in February.

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 when stocks become available from suppliers.

7.1.4.2 Achmore

The access point will be upgraded when stocks become available from suppliers.

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. Although we planned to upgrade this link it was not possible as there is not enough space on the relay until the Achmore link has been moved and upgraded to 60 GHz. **Action: Phil.**

7.1.4.4 Braeintra

The upgraded access point is highlighting potential alignment errors on subscribers' antenna, further investigation is required. **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 upgraded when stocks become available from suppliers.

7.1.4.7 Ardaneaskan West

No issues

7.1.4.8 Leacanashie

The access point will be upgraded when stocks become available from suppliers.

7.1.4.9 North Strome

The access point will be upgraded when stocks become available from suppliers.

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**

We have received our 60 GHz license from Ofcom and the unit will be upgraded in due course. **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 - 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

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

8.6.1.1   Ardaneaskan East

All installations have been completed.

8.6.1.2   Ardnarff

One installation needs to be upgraded. **Action: Phil**

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: Subscriber, Phil, Mary & Ken**

One installation is waiting to have their line of sight checked. **Action: Subscriber, Phil, Mary & Ken**

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.

8.6.2 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

8.7 Company Logo

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

8.8 General Data Protection Regulation (Data Protection Act)

We will review our GDPR policy. **Action: Mary**

9 Director's training session

9.1 Configuring Ubiquiti and MikroTik equipment

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

10 AoB

Correspondence was received just prior to the meeting and will be dealt with at subsequent meetings when time allows.

11 Next meeting

Monday 10th April.
The meeting finished at 9:20 pm