

Broadband Steering Group

Minutes of the Meeting held by Microsoft Teams video call on the 14th July 2021 @ 7:30 pm

1 Present and Apologies

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

2 Approve and adopt previous minutes

The previous minutes for June, were proposed by Kath, 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

We have signed up with Plusnet for 24 months at a very competitive rate. **Completed**

Mary has started investigating options in Lochcarron so far we have not had any responses so we will chase. **Action Mary**

3.2 False RADAR

A few false RADAR events were recorded since the last minutes. We will investigate running our new software automatically at a set time and using it to reset any units that have changed frequency. **Action: Phil**

3.3 Subscribers

Live subscribers	- 45
Waiting for installations / activation	- 3
Waiting for subscriber's confirmation of details	- 0
Pending installations	- 5
Waiting for installations	- 19
Leavers since the last minutes	- 1
Subscriber's refusing connections	- 1
New joiners since the last minutes	- 3
Total	- 73

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**

We have completed installations for four of the twelve subscribers whose connections to CMNet were suspended whilst COVID restrictions were in place. One of the twelve refused his connection when approached for an installation date. Ken Hopper has been an enormous help in this task; fitting brackets and installing cable runs and helping us with the installations. It would have taken us several weeks to complete without Ken's help. **Action: Phil & Mary (and Ken)**

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

Mary has chased SSE to resolve the problems with their website. SSE have also failed to register the correct tariff against our account and subsequently charged us the wrong amount. Mary will chase SSE again. **Action: Mary**

5 Finance Director's Report

5.1 Monthly Statistics

Revenue for June:-

Brought forward

Balance	£1,631.60		
Creditors		£6,809.51	
Debtors		£5,041.83	
Net			£1,767.68
Bank balance			£10,677.36

This month

Income	£430.50		
Expenditure	£436.57		
P&L	-£6.07		
Creditors		£234.73	
Debtors		£27.51	
Net			£207.22
Adjusted P&L			£201.15

Carried forward

Balance	£1,625.53		
Creditors		£7,044.24	
Debtors		£5,069.34	
Net			£1,974.90
Bank balance			£10,878.51

5.2 This year's surplus

We have decided we would buy some of the new Ubiquiti equipment to trial so we can see how well it performs in the "real world". We will buy four of the new subscriber's antennas and two of the new access points. This will give us enough equipment to trial, then deploy and keep back units for spares. As agreed last month we will also buy more plastic enclosures to replace the rusting metal units.

This still leaves a considerable surplus this year. It was decided that the surplus would be used to return £36 of the new joiner's premium to subscribers; thus reducing the NJP from £96 to £60. To be eligible subscribers must be in contract on the last day of August 2021 and remain subscribers until the last day of August 2022. Subscribers who have paid over £60 NJP will have the excess credited to their account on 31/8 2021. Anyone still paying the NJP will have their monthly rate adjusted to cap payments at £60. Anyone serving notice to leave CMNet before 31/8/2022 will have to repay their NJP rebate in full.

The NJP for new joiners will be reduced from £8 to £5 a month and will be collected in twelve monthly payments.

5.3 Review of replacement equipment costs.

As outlined in 5.2 above we will buy some of the latest equipment to see how it compares with the kit we currently use.

Action Phil

5.4 Outstanding Expenses Claims

Phil & Mary's expenses claims have now been submitted. **Completed**

5.5 Next year's tariff

The total number of gigabytes sold was 9,900. The line rental charges have been reduced now we have signed up with Plusnet making the break even tariff for 3 fibre lines 88 GB per £1 and for 4 fibre lines 71 GB per £1.

Although there is more work to do when calculating the fixed portion of the tariff due to changes in replacement equipment costs it was decided we should review the current tariff now so new rates can be brought in at the start of our new financial year, i.e. on the 1st September.

It was decided that the fixed portion of the tariff would remain unchanged at £5 but the variable portion will change from £1 per 50 GB to £1 per 75 GB.

Rates will therefore change as follows:-

Old quota	Old charge	New quota	New charge	Annual saving
50	£6.00	75	£6.00	£0.00
100	£7.00	150	£7.00	£0.00
150	£8.00	150	£7.00	£12.00
200	£9.00	225	£8.00	£12.00
250	£10.00	300	£9.00	£12.00
300	£11.00	300	£9.00	£24.00
350	£12.00	375	£10.00	£24.00
400	£13.00	450	£11.00	£24.00
450	£14.00	450	£11.00	£36.00
500	£15.00	525	£12.00	£36.00
550	£16.00	600	£13.00	£36.00
600	£17.00	600	£13.00	£48.00
650	£18.00	675	£14.00	£48.00
700	£19.00	750	£15.00	£48.00
750	£20.00	750	£15.00	£60.00
800	£21.00	825	£16.00	£60.00
850	£22.00	900	£17.00	£60.00
900	£23.00	900	£17.00	£72.00
950	£24.00	975	£18.00	£72.00
1000	£25.00	1050	£19.00	£72.00
1050	£26.00	1050	£19.00	£84.00
1100	£27.00	1125	£20.00	£84.00
1150	£28.00	1200	£21.00	£84.00
1200	£29.00	1200	£21.00	£96.00

5.6 Outstanding subscribers' credit

The subscriber's surplus has been donated to the hall. **Completed**

5.7 Outstanding subscribers' debt

The total outstanding debt is £6.

5.8 Housekeeping

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

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

Drop outs in Craig - we are still recording a few drop outs due to false RADAR. **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 - no progress this month due to other priorities. **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**

Configuring new equipment for the Ardaneaskan installations required an update of the MikroTik software. To ease future maintenance a process was started to install the new version on all existing equipment to keep everything up to date. Unfortunately this caused a problem with The Glen router as the new software was not compatible with the old backup script. A new configuration had to be created from scratch and the unit physically replaced. To reduce the risk of this sort of problem in the future the backbone MikroTik routers will be incorporated in the software that is used to automatically configure subscribers' equipment. **Action: Phil**

7.1.1 Usage quotas

The monthly total for June was 5.1 TB. The daily average was 175 GB, with a peak usage of 241 GB on Sunday 13th. CMNet peaks since operations started; highest average daily usage 229 GB, highest single days usage - 367 GB, highest monthly usage - 7.1 TB.

One subscriber exceeded their quota in June and has had their contract 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

This section of the network is now fully tested and installations have started. **Completed**

7.1.3.3 Ardaneaskan West

Nothing to report

7.1.3.4 Ardnarff

Nothing to report

7.1.3.5 Braeindra

Nothing to report

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

The North Strome installation will be completed at the first opportunity. **Action: Phil**

7.1.3.8 Strome Ferry

The North Strome relay will be completed at the first opportunity. **Action: Phil**

The Strome Ferry installation will be completed at the first opportunity. **Action: Phil**

We will install a further low level test site in Strome Ferry. **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. **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

No requests 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 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.

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

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

The configuration has been updated ready for subscriber’s installations. **Action: Phil**

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

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.

Installations have now resumed.

8.7.1.1 Ardaneaskan East

Eight subscriber's equipment has been configured and is ready to install. **Action: Phil**

Four installations have been completed. **Action: Phil**

When asked for an installation date one subscriber reneged on their commitment after all the preparatory work had been done, all their units had been configured and the system updated with their details - thus wasting hours of time and effort. Yet more time and effort will now have to be spent removing their details from the system.

8.7.1.2 Strome Ferry

Waiting on the upgrade of the North Strome relay

8.7.1.3 Leacanashie

Ready to start installations

8.7.1.4 North Strome

Ready to start installations

8.7.1.5 Achmore

Ready to start installations

8.7.1.6 Braeintra

Ready to start installations

8.7.1.7 Portchullin

Installations pending Portchullin raised beach enclosure test / replacement. **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 Lochcarron

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 18th August 19:30 maybe face to face?

The meeting was held by Microsoft Teams video conference and finished at 20:45