

Broadband Steering Group

Minutes of the Meeting held by Microsoft Teams video call on the 12th May 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 April, 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

3.1 COVID

According to the latest news from the Scottish government from the 17th May we will be able to enter homes which will remove a major restriction and mean we will be able to re-start installations. Also Mary and Phil are scheduled for their second jabs in the next few days and so will have the full benefit of the vaccination by the end of May. Once the domestic backlog caused by the COVID restrictions has been cleared we will restart work on installations. Our first task will be to bring all directors up to speed to help with maintenance and support. We will then need to review the pending installations and progress the suspended administration tasks. The "mothballed" equipment waiting to be installed will have to be rechecked and retested ready to start subscribers' installations. Physical installations are therefore unlikely to start before the end of May.

3.2 Bandwidth

There was some debate about what should be done about Plusnet's inability to resolve the poor performance through Achmore Hall and it was decided that we would switch to Zen at the end of the current contract. We will also investigate the possibility of switching to a full fibre connection in Achmore. **Action Mary & Phil**

It was also decided to see if we could improve the speeds through the Lochcarron gateway. **Action Mary**

3.3 False RADAR

Our software is now providing a log of False RADAR events, this is allowing us to recognise repeats of events and slowly these are being reduced. However there are still some events which appear to be completely random. For these events we will have to accumulate a larger dataset and these may prove very difficult to eliminate. **Action: Phil**

3.4 Subscribers

| | |
|---|-------------|
| Live subscribers | - 42 |
| Waiting for installations / activation | - 3 |
| Waiting for subscriber's confirmation of details | - 0 |
| Pending installations | - 9 |
| 3.4.1 Waiting for new backbone relays | |
| Waiting for installations | - 19 |
| Leavers since the last minutes | - 0 |
| New joiners since the last minutes | - 0 |
| Leavers since the last minutes | - 0 |
| New joiners since the last minutes | - 0 |
| Total | - 73 |

We have had requests for connections in Lochcarron, Strathcarron and North Strome; once our existing commitments have been met we will see if these are feasible. **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**

There are twelve subscribers whose connections to CMNet will be progressed as soon as COVID restrictions are lifted.

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 will restart on this software now we are about to restart installations. **Action: Phil**

4.3 Access to the bank account

Mary will talk to our insurers in June as part of the renewal process and obtain their view of the changes at RBS. **Action: Mary**

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

We will obtain up to date meter readings and pass these onto SSE. **Action: Mary**

5 Finance Director's Report

5.1 Monthly Statistics

Revenue for April:-

Brought forward

| | | | |
|---------------------|------------------|-----------|-------------------|
| Balance | £1,089.98 | | |
| Creditors | | £6,707.54 | |
| Debtors | | £5,015.76 | |
| Net | | | £1,691.78 |
| Bank balance | | | £10,059.84 |

This month

| | | | |
|-------------------------|----------------|--------|----------------|
| Income | £416.07 | | |
| Expenditure | £164.16 | | |
| P&L | £251.91 | | |
| Creditors | | £74.10 | |
| Debtors | | £4.57 | |
| Net | | | £69.53 |
| Adjusted P&L | | | £321.44 |

Carried forward

| | | | |
|---------------------|------------------|-----------|-------------------|
| Balance | £1,341.89 | | |
| Creditors | | £6,781.64 | |
| Debtors | | £5,020.33 | |
| Net | | | £1,761.31 |
| Bank balance | | | £10,381.28 |

Prior to the meeting Phil circulated a first draft of a review of replacement equipment costs. This raised various policy questions e.g.:-

- 1) As the vast percentage of equipment installed over 6 years ago is still working does it make sense to continue to budget on 5 years as the useful life of equipment? It was decided to base budget calculations on a 6 year working life.
- 2) In the past we have only budgeted to replace kit that is actually deployed; backup equipment, in boxes in storage, was not counted. However some backup kit is now installed on Creag Mhaol but is not powered up. It has been installed on Creag Mhaol so it can be automatically brought into service should the primary kit fail. If we now count this backup kit as deployed it will be a major change to the way we budget replacement equipment. No decision was reached, more discussions are needed. **Action Neil, Mary, Phil & Kath**
- 3) Due to ongoing technology developments it is now difficult to cost direct replacements for some of the kit we currently have in use. For the purposes of this first draft document units with the closest but higher specification were priced. However this means some of the replacement kit used for pricing has a much higher spec than the equipment we currently use - and cheaper alternatives do exist. It was decided we would try to find reviews of some of the cheaper options to see if we should instead price these as replacements. **Action Phil**

4) Although we have installed a large amount of equipment on Creag Mhaol ready to connect new subscribers COVID has delayed installations. This means that the shared cost of backbone equipment has risen although the number of subscribers has not. For the purposes of producing a budget it was decided we would only count subscribers who are currently connected or who have paid a deposit. **Action Phil**

Once these and other issues are resolved we will be able to prepare a budget and review the tariff. **Action Neil, Mary, Phil & Kath**

Phil & Mary's expenses claims were not settled this month as the HMRC tax bill is now due. Mary will pay our corporation tax and then reclaim it along with all the other outstanding amounts. **Action Mary, Phil & Kath**

5.2 Next year's tariff

The total number of gigabytes sold was 9,800. The break even tariff for 2 fibre lines is 115 GB per £1, for 3 fibre lines is 77 GB per £1 and for 4 fibre lines is 58 GB per £1.

5.3 Outstanding subscribers' debt

The outstanding debt is £23.57.

5.4 Housekeeping

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

5.5 Payments for installations of subscriber's equipment

All payments are up to date.

5.6 Annual Accounts, HMRC & Companies House Returns

The annual returns for HMRC & Companies House were formally approved by all present. The HMRC submission will be completed online and the Companies House returns sent in by post. Mary will pay the tax bill by credit card and then submit an expenses claim. **Action: Phil & Mary**

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 are still recording a few drop outs due to false RADAR. **Action: Phil**

Unable to access a website - One subscriber has reported they cannot access one specific website since we made the switch from Zen to Plusnet. We will replace the Achmore Hall router and then rerun the tests. No progress this month.

Action: Phil

The problems with the Achmore line's poor performance persist. Plusnet responded to our request to set up monitoring on the whole of our connection from Achmore Hall router to their data centre for an extended period to say that they are unable to do this. The only option they can offer is to send out an engineer. After some debate it was decided to drop Plusnet and switch to Zen when our contract comes up for renewal. **Action: Mary**

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 Strome Low relay dish resisted all attempts to reconfigure it from its reset to factory defaults. It was therefore decided to reconfigure the dish on Achmore High to connect with the backup dish on Strome Low. This was done on the 27th April during a scheduled systems maintenance session. All subscribers in Ardaneaskan East, North Strome, Strome Ferry and Ardnarff were then automatically routed through Plockton. The failed primary dish will be recovered in due course. **Action: Phil**

7.1.1 Usage quotas

The monthly total for April was 6.1 TB. The daily average was 202 GB, with a peak usage of 286 GB on Friday 2nd. CMNet peaks since operations started; highest average daily usage 229 GB, highest single days usage - 367 GB, highest monthly usage - 7.1 TB.

Two subscribers exceeded their quota in April 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

One subscriber's connection is under test. **Action: Phil**

7.1.3.3 Ardaneaskan West

Nothing to report

7.1.3.4 Ardnarff

Nothing to report

7.1.3.5 Braeintra

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 once the COVID restrictions are lifted. **Action: Phil**

7.1.3.8 Strome Ferry

The North Strome relay will be completed at the first opportunity once the COVID restrictions are lifted. **Action: Phil**

The Strome Ferry installation will be completed at the first opportunity once the COVID restrictions are lifted. **Action: Phil**

We will install a further low level test site in Strome Ferry once the COVID restrictions are lifted. **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**

We have decided to leave Plusnet when the current contract expires. **Action: Mary**

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

Some configuration changes are pending. **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.

All work at subscriber's premises has been suspended pending the relaxation of the government's COVID restrictions.

8.7.1.1 Ardaneaskan East

We are part way through the firmware updates and configuration of the new subscribers' equipment. **Action: Phil**

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 Portchullin

Installations pending Portchullin raised beach enclosure test.

8.7.2 Phase 4 - Further investigations / backbone development required.

8.7.2.1 Ardaneaskan West

8.7.2.2 Reraig

8.7.2.3 Lochcarron

8.7.2.4 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 16th June 19:30 maybe face to face?

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