

Broadband Steering Group

Minutes of the Meeting held on the 15th July 2020 @ 7:30 p.m. Fernaig House

1 Present and Apologies

Present: Phil Game, Mary MacBeth, Neil MacRae, Kath Smith
Sue Waddell has resigned.

2 Approve and adopt previous minutes

The previous minutes for June, 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

COVID-19 - This month's meeting was delayed by a week so that we could take advantage of the relaxation of restrictions for meetings which came into effect of the 10th July.

The radio on the Achmore High relay that links to Strome Low is inaccessible - possibly due to lightning storm damage.

All the units on the Strome relays have automatically switched to route through Lochcarron. The Achmore High radio will be replaced. **Action: Phil**

3.1 Bandwidth

The Plockton line is still operating very close to full capacity.

It is now clear that warm damp air coupled with high demand for both download and upload causes a drop in throughput on the radio link to Plockton. On a few occasions this has become noticeable and has become the bottleneck in the system rather than the capacity of the fibre line in Plockton. We are confident that this will be resolved when the new faster and larger dishes are installed. **Action: Phil**

Openreach have again told Zen that it is not possible to install fibre in the hall Openreach connected the new line to the fibre cabinet. See 3.4.1 for more ridiculous details. **Action: Victor Meldrew**

3.2 False RADAR

There have been a couple of events on The Glen South access point since the last set of minutes and one event on the link to The Glen from Creag Mhaol. There have been some events on the link to Craig which were not being registered by the Ubiquiti monitoring software. We have started a programme to improve monitoring of all links through the MikroTik software via automated emails. **Action: Phil**

There was another event on the Achmore access point when it dropped connections to subscribers' antenna, our automated software rebooted the device and connections were restored.

Some of these events took place outside normal hours of usage and may not have been apparent to any subscribers.

We continue to gather more information about the events and "tune" the units. **Action: Phil**

3.3 New Backhaul Installation in Achmore Hall

3.3.1 Get new line installed in the hall

A brief summary of this saga:-

We placed an order for a line in the hall on the n the 27th February.

The Openreach engineer arrived to install the line on the 17th March. He had the wrong ladder and did not have a co-worker and so could not install the line via the BT / Hydro shared pole. After returning from Kyle (to get the right ladder and a co-worker) he installed the line via the pole in front of the hall as no co-worker was available.

On the 23rd March Zen told us that the line will be activated on the 26th March.

The new router from Zen arrived on the 25th March and was installed in the hall.

On the 27th we told Zen we have no connection.

Zen says the engineer could not complete the work because of an Openreach routing problem.

On the 31st March Zen inform us there is unlikely to be any progress until 1st June because of the lockdown.

On the 7th April Zen inform us that Openreach have said that the line in the hall was routed through the wrong cabinet and fibre is not available our only option is ADSL.

We replied to say ADSL is no good we want the fast fibre line we ordered.

Zen says Openreach says the only option is ADSL

On the 28th April Zen emailed to say our new line in the hall would be activated on the 29th April.

We tested the line remotely late on the 29th but could not access our router. On the 30th we visited the hall to check everything was powered up (which it was) and ran diagnostics on the Openreach connection. The diagnostics were sent to Zen.

Zen replied on the 4th May to say that they had been informed by Openreach that it is not possible to provide fibre services as the hall line is "exchange only". Therefore Zen has had to **cancel this part of the order!**

Mary contacted Zen sales who will contact Openreach to resolve this issue.

We chase Zen on the 21st May - their records show the order has been cancelled by Openreach and the only option we have is to start again from scratch with a new order, which we do.

On the 3rd June Zen say Openreach have cancelled the order as fibre is not available. Zen have escalated this with Openreach and asked them to update their records to show fibre is present.

We send Zen photos showing the fibre cabinet and the hall and a satellite image showing the hall is within 60 metres of the fibre cabinet.

We called Zen on the 12th June after hanging on the phone for 10 minutes they say they will call back with an update. and then...

Unbelievably the saga continues:-

We called Zen on the 15th June and again forwarded the photographs showing the Hall and the fibre cabinet.

We asked for an update on the 19th.

Zen replies to say they have spoken to Openreach who again say that fibre is not available.

Mary complains to Openreach - who say they only get involved in issues to do with new builds.

Mary complains to Ofcom who say that Zen and Openreach have a problem resolution procedure and it's nothing to do with them.

On the 22nd June we tell Zen that other ISPs websites show that fibre is available but not on the line that has already been installed. To get fibre from another ISP we need to order another line and the fibre connection. We ask Zen why they can't do that themselves.

On the 29th we called Zen and they say there has been no progress on the installation.

On the 30th we write to Zen to cancel our order.

On the 30th we place an order with Plusnet; the installation is scheduled for the afternoon of the 21st July.

On the 1st July an Openreach engineer arrives to connect the existing line in the Hall to the fibre cabinet. We call Zen who say they have no knowledge of the request and they say the only option is to start again from scratch and apply for a line and fibre. **Action: Victor Meldrew**

We have heard nothing more from Zen and have not contacted them.

Plusnet say Openreach are visiting on the 17th for "external work".

On the 17th Plusnet say the new fibre line will be installed on the morning of the 24th July rather than the 21st.

Plusnet have said although the line will be installed on the 24th it will not be activated until the 25th **Action: Phil & Mary**

[3.3.2 Test the new line](#)

If only we could!

[3.3.3 Install external equipment at the hall](#)

We will endeavour to minimise disruption to existing subscribers when we bring the new capacity online. **Action: Phil**

[3.3.4 Install new dish on CMAchmoreHigh for Plockton access](#)

[3.3.5 Switch connection from Plockton to CMAchmoreHigh](#)

[3.3.6 Install new dish on CMAchmoreLow for Achmore access](#)

[3.3.7 Activate the new line](#)

3.4 Subscribers

Live subscribers - 43

Waiting for installations / activation - 0

Waiting for subscriber's installation dates - 0

[3.4.1 Waiting for new backbone relays](#)

Waiting for installations - 31

Leavers since the last minutes - 0

New joiners since the last minutes - 0

Total - 75

There have been no installations since the last minutes.

We have had a request for a connection in Lochcarron; once our existing commitments have been met we will see if this is feasible.

Now the COVID-19 restrictions are being lifted we can restart testing of the new relays. See 9.3 for more details

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**

[3.4.2 Contracts and tariffs](#)

See section 7.6.

3.5 *New MikroTik replacements for AirRouters*

The “standard configuration” for the new MikroTik router is under test. The configuration was generated and installed automatically by our software. **Action: Phil**

3.6 *Terms of Reference*

Deferred

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 - this software is being tested. **Action: Phil**

4.3 *Access to the bank account*

We have received confirmation that Kath has now been set up as a bank signatory. The next step is to get Kath online access to the account. **Action: Mary**

4.4 *Terms of Reference*

Deferred

5 **Finance Director’s Report**

Kath Smith’s nomination to become a bank signatory was approved by all directors via email on the 7th July.

5.1 *Monthly Statistics*

Revenue for June:-

When Joe resigned with immediate effect in April we lost access to the bank account.

So for the moment we do not have online access to the bank account and therefore cannot produce figures for June, May or April.

5.2 *Next year’s tariff*

The total number of gigabytes sold was 8,800. The break even tariff for 2 fibre lines is 103 GB per £1, for 3 fibre lines is 69 GB per £1 and for 4 fibre lines is 52 GB per £1.

5.3 *Outstanding subscribers’ debt*

No report possible this month.

5.4 *Housekeeping*

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

5.5 *Payments for installations of subscriber’s equipment*

No report possible this month.

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*

7.1.1 *Problems and complaints*

There were a series of power outages this month initially triggered by an electrical storm. It appears some of our equipment may have been damaged - further investigation is required. **Action: Phil**

One subscriber reported drop outs in Braeintr. Some instances were traced to the poor performance of the Plockton radio link - see 3.1. So far other instances have not been traced, we have asked the subscriber to provide some more examples so we can investigate further. **Action: Subscriber**

One subscriber reported drop outs in Craig. Investigation showed these were false RADAR events which were not being logged by the Ubiquiti management software. We will add additional monitoring to the MikroTik monitoring software. **Action: Phil**

There were a couple of incidents of AirRouters spontaneously rebooting after the upgrade to the latest version of the firmware. However there have been no incidents for the past couple of weeks so this will not be investigated further. There are still a few Ubiquiti units to upgrade to the new version of firmware this will be scheduled in due course.

Action: Phil

7.1.2 Usage quotas

The monthly total for June was 4.8 TB. The daily average was 159 GB, with a peak usage of 269 GB on Thursday 25th. CMNet peaks since operations started; highest daily usage - 274.5 GB, highest monthly usage - 5.1 TB.

Three subscribers have exceeded their quota and have had their quotas increased. **Action: Phil**

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 Installation of equipment

Now the COVID-19 restrictions have been lifted we will restart installations as soon as the additional capacity in the Hall is available. **Action: All**

7.1.4.1 Ardaneaskan

The LoS (line of sight) from the raised beach is to be confirmed however the LoS from Creag Mhaol has now been confirmed. **Action: Phil**

7.1.4.2 Craig

We are investigating a report of drop outs. **Action: Phil**

We will review the situation when we have more experience of low level links over water or other options become available. **Action: Phil**

7.1.4.3 Achmore

The new unit is also showing intermittent faults which causes subscribers antenna to be disconnected - this fault is not the same as the false RADAR issue. For the moment our software is detecting the problem and rebooting the unit to re-establish connections. We will investigate this further when time permits. **Action: Phil**

7.1.4.4 North Strome

No progress this month.

7.1.4.5 Braeintra

We are investigating a report of drop outs. **Action: Subscriber, Phil**

7.1.4.6 Other installations

The high relay above Strome Ferry has suffered severe storm damage affecting the link to Portchullin raised beach and to Ardaneaskan East. The rock anchor studs have been loosened, at least one scaffold pole and four radios will need to be replaced. Replacement scaffold poles have been purchased so the relay can be repaired. **Action: Phil**

7.1.5 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 - in the past month this software has been used to configure a MikroTik replacement for an AirRouter and to standardise subscribers' routers configurations. It has been enhanced to cover subscribers' access points and is being tested on subscribers' external antenna. **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

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

7.6 Revised Terms and Conditions

There was a debate as to whether we should change our contract and / or procedures in the light of a subscriber defaulting.

It was decided that we could not continue with installation on a basis of full trust in subscribers and reluctantly we would have to change our procedures to mitigate the risk of money and effort being wasted in the future.

We will produce a separate document with full details in due course. **Action: Phil**

But the key points are:-

- Subscribers will have to give written agreement to terms and conditions as laid out in our Customer Contract before we start any work.
- Subscribers will have to pay an upfront installation / set up charge before we start any work.
- If the subscriber defaults on the agreement the installation / set up charge will not be refunded.
- The set up charge will be refunded in the form of a monthly credit in the second year of membership.

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

8.2.1.1 Equipment and tidy up

The new dishes have arrived and will be configured and installed when traffic can be switched away from Plockton.

Action: Phil

8.3 Backbone development

8.3.1 Plockton

No issues.

8.3.2 Lochcarron

No issues.

8.3.3 Creag Mhaol

8.3.3.1 Existing relays

No issues.

8.3.3.2 New relays

No progress since the last report.

8.3.3.2.1 Next steps

The Achmore High relay dish that links to Strome Low needs to be replaced with a smaller unit to reduce the signal strength.

Repair the Strome High relay and replace the damaged radios.

The new relay automated recovery algorithms are now ready to test with subscriber installations

Replace the leaking Portchullin raised beach enclosure

Re-align the existing Portchullin Access Point

Add an additional Portchullin Access Point

Install one subscriber's test equipment in Ardnarff

Install the Strome Ferry relay in North Strome

Install one subscriber's equipment in Ardaneaskan East

Install one subscriber's test equipment in North Strome

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

Install one subscriber's test equipment in Portchullin

Action: Phil, Mary, Neil

8.3.4 The Glen

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

8.3.5 Ardaneaskan

As soon as the damaged relay has been repaired we will set up one subscriber's connection as a test. **Action: Phil, Mary**

8.3.6 Leacanashie

The Leacanashie access point is under test. **Action: Phil**

8.3.7 Portchullin (raised beach)

The Portchullin enclosure will be replaced at the first opportunity. No progress this month. **Action: Phil**

8.3.8 Craig

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

8.3.9 North Strome

We are now ready to set up the North Strome link. **Action: Phil, Neil, Mary**

We are now ready to set up one subscriber's connection as a test. **Action: Phil, Neil, Mary**

8.3.10 Strome Ferry

The activation of the Strome Ferry access point is waiting on the installation of the North Strome link. **Action: Phil**

8.3.11 Ardnarff

We are now ready to set up one subscriber's connection as a test. **Action: Phil, Neil, Mary**

8.3.12 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

8.6.1 ADSL Broadband installation at Plockton High School

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

8.6.2 ADSL Broadband installation at Lochcarron

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

8.6.3 ADSL Broadband installation at Achmore

We are waiting for the broadband connection to be configured. **Action: Openreach**

8.7 Implementations

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

Testing of the kit on Creag Mhaol is complete and we are now ready to trial subscriber connections. **Action: Phil**

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

9.2 Induction for Kath

We gave Kath the background as to why CMNet came into existence, the setting up of a demonstration in the Hall and the process of obtaining a grant from Community Broadband Scotland.

10 Next meeting

Date of next meeting Wednesday 12th August 7:30 at Fernaig House.

The meeting closed at 10:00 pm