

# Broadband Steering Group

Minutes of the Meeting held by email exchanges in the week starting the 8<sup>th</sup> June 2020

## 1 Present and Apologies

Contributing by email: Phil Game, Mary MacBeth, Neil MacRae, Kath Smith, Sue Waddell

## 2 Approve and adopt previous minutes

The previous minutes for May, were proposed by Neil, 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 - We are able to make progress in areas that do not breach the government's guidelines but for the moment new subscribers' installations are on hold. Our priority will be to support the current subscribers, and to develop infrastructure and software.

### 3.1 Bandwidth

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

Openreach have **again** told Zen that it is not possible to install fibre in the hall. See 3.4.1 for more details. When the new line is installed we will complete the infrastructure changes to bring the additional capacity online.

### 3.2 False RADAR

There were a couple of events on The Glen South access points in May; the output power of the access point radio has been reduced.

For a period of 15 minutes we had a series of events on the Achmore access point on the 5<sup>th</sup> May - aside from this there were no other events on this unit for the rest of May. We have implemented software that will detect the problem and automatically reboot the unit, this software "trap" will remain in place until we have a permanent fix.

It is now clear that some monitoring software from Ubiquiti is reporting RADAR events when there have been none. At the moment it is not clear why this should happen.

The link to Stromeferry (via North Strome) continues to suffer from a few problems - the incidents have been reduced since last month but it is too soon to say whether the problem on this link has been eliminated by the most recent changes.

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

### 3.3 Server Problems

There have been no more incidents of the server rebooting since the last report. The server hard disk has been cleared down and a disk analysis and repair has been run. **Completed**

### 3.4 New Backhaul Installation in Achmore Hall

#### 3.4.1 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 27<sup>th</sup> February.

The Openreach engineer arrived to install the line on the 17<sup>th</sup> 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 23<sup>rd</sup> March Zen told us that the line will be activated on the 26<sup>th</sup> March.

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

On the 27<sup>th</sup> we told Zen we have no connection.

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

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

On the 7<sup>th</sup> 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 28<sup>th</sup> April Zen emailed to say our new line in the hall would be activated on the 29<sup>th</sup> April.

We tested the line remotely late on the 29<sup>th</sup> but could not access our router. On the 30<sup>th</sup> 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 4<sup>th</sup> 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 21<sup>st</sup> 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 3<sup>rd</sup> 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 12<sup>th</sup> June after hanging on the phone for 10 minutes they say they will call back with an update.

We are still waiting for their response. **Action Mary / Phil**

**It is now fifteen weeks since we placed our order.**

#### 3.4.2 Test the new line

If only we could!

#### 3.4.3 Install external equipment at the hall

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

#### 3.4.4 Install new dish on CMAchmoreHigh for Plockton access

#### 3.4.5 Switch connection from Plockton to CMAchmoreHigh

#### 3.4.6 Install new dish on CMAchmoreLow for Achmore access

#### 3.4.7 Activate the new line

### 3.5 Subscribers

Live subscribers - 43

Waiting for installations / activation - 0

Waiting for subscriber's installation dates - 0

#### 3.5.1 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.

The remaining installations are waiting on the COVID-19 restrictions being lifted and the completion of the 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**

#### 3.5.2 Contracts and tariffs

When COVID-19 restrictions are lifted we will review our contract and tariff.

### 3.6 New MikroTik replacements for AirRouters

A "standard configuration" MikroTik router is under test. **Action: Phil**

### 3.7 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 - no progress this month **Action: Phil**

### 4.3 Terms of Reference

Deferred

## 5 Finance Director's Report

### 5.1 Monthly Statistics

#### Revenue for May:-

When Joe resigned with immediate effect in April we lost access to the bank account. Although Sue's details have been sent through we received nothing back from RBS. Mary has chased RBS to be told that they have sent confirmation of

Sue's appointment through to a mobile that belongs to individuals who are no longer bank signatories or directors of CMNet. Now we know that Sue has been registered with our RBS account Mary & Sue have completed the documentation to register for online banking. Only to have the form rejected by the RBS website without any meaningful error message. Mary will call RBS again! **Action: Mary**

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

### 5.2 *Next year's tariff*

The total number of gigabytes sold was 8,650. The break even tariff for 2 fibre lines is 102 GB per £1, for 3 fibre lines is 68 GB per £1 and for 4 fibre lines is 51 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.

### 5.6 *Annual Accounts*

All the documents relating to the yearend August 2019 have been uploaded to the website. **Completed**

## 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*

One subscriber reported drop outs in Braeindra. This only appeared to be affecting the units with newer chips. On further investigation it seems the drop outs were so brief they were not being registered on our main monitoring system; however they were being picked up by our secondary monitoring software. A change was made to alter the configuration of the access point which improved the system for the newer units but some faults were still being recorded. It was subsequently discovered that the problem was being created by a weak overlapping frequency which seemed to affect the new chips more than the old. Once the overlap was removed the problem was resolved.

The Achmore access point was corrupted at 23:23 on the 8<sup>th</sup> June whilst upgrading firmware for Achmore subscribers.

This was caused by our own software detecting that Achmore subscribers' units were offline (a normal part of the upgrade process) and so automatically rebooting the access point - unfortunately mid way through its own software update. Neil and Phil replaced the unit on the 9<sup>th</sup> June whilst Mary monitored the system and it came back online at 11:06 am.

The rest of the Ubiquiti units will be upgraded to the new version of firmware in due course. **Action: Phil**

#### 7.1.2 *Usage quotas*

The monthly total for May was 4.7 TB. The daily average was 150 GB, with a peak usage of 216 GB on Saturday 2<sup>nd</sup>. CMNet peaks since operations started; highest daily usage - 274.5 GB, highest monthly usage - 5.1 TB.

Two 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*

All subscriber installations have been suspended pending the lifting of COVID-19 restrictions.

##### 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 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 old unit was corrupted and has been replaced.

#### 7.1.4.4 *North Strome*

No progress this month.

#### 7.1.4.5 *Braeintra*

No problems.

#### 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. **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 will be enhanced to cover 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**

## 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 one subscriber's test equipment in Portchullin

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.

**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

## 10 Next meeting

Date of next meeting Wednesday 8<sup>th</sup> July

The minutes were created from email exchanges during the week starting 8<sup>th</sup> June