

# Broadband Steering Group

Minutes of the Meeting held by email exchanges in the week starting the 6<sup>th</sup> April 2020

## 1 Present and Apologies

Contributing by email: Phil Game, Georgie Grimson, Joe Grimson, Mary MacBeth, Neil MacRae

## 2 Approve and adopt previous minutes

The previous minutes for March, 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 Appointment of new directors

Phil proposed Sue Waddell & Kath Smith be appointed to join the board and the proposal was accepted unanimously.

## 4 Departure of directors

Joe Grimson and Georgie Grimson resigned with immediate effect on the 9<sup>th</sup> April.

Joe was one of the founding members of CMNet in April 2013. As well as working on the installation of subscribers and backbone equipment Joe was instrumental in designing the Customer Agreement and determining our Data Protection policy. Joe has volunteered to continue to help with the monitoring of the system.

Georgie joined the board in October 2017 and has been responsible for producing the monthly accounts and financial summaries.

We thank both of them for their huge contribution over many years.

## 5 Chairman's report

COVID-19 - Although the weather has improved somewhat in the past month we are now subject to restrictions due to Coronavirus. The restrictions have also seen a large increase in the use of the system - see 9.1.2. The installation of the new broadband backhaul in Achmore Hall is also being delayed by Coronavirus see 5.3.1. We will endeavour to continue to make progress in areas that do not breach the government's guidelines. Our priority will be to support the current subscribers.

### 5.1 Bandwidth

The Plockton line is still operating very close to full capacity, at times showing periods where downloads exceed 70 Mbps. We have therefore left the download speeds restricted to a maximum of 20 Mbps, down from the normal 30 Mbps.

We are waiting on Openreach to complete the new installation in the hall - see 5.3.1 for more details.

We still have the line in Lochcarron available should we need more capacity, but this line has poor upload speeds and so it will impose upload speed restrictions on subscribers that are moved across.

There was some debate as to whether we should continue with infrastructure upgrades in the light of COVID-19 especially as Openreach have failed to deliver the new line in Achmore hall. It was decided we would not make any changes that would cause disruption to the system until we have a date from Openreach for the new line to be installed. We will review this again next month. **Action All**

After gathering data for the past several weeks we have been able to identify units that have had no false RADAR events for over a month and we shall assume these are "fixed". The data has also shown up "repeat offenders" and these have had their radio frequencies changed to move to another band. This leaves a handful of incidents and we will continue to record events and will analyse the data gathered in due course. **Action Phil**

### 5.2 Server Problems

There have been no more incidents of the server rebooting since the last report. However when time permits we will clear down the server hard disk and run a disk analysis and repair. **Action Phil**

### 5.3 New Backhaul Installation in Achmore Hall

#### 5.3.1 Get new line installed in the hall

The new telephone line was installed in the hall as planned on the 17<sup>th</sup> March and Openreach was scheduled to make the broadband connection on the 25<sup>th</sup> March. However they reported to Zen that there was a "routing problem" which they would have to pass to the "planning team". Zen subsequently informed us that Openreach connected the new line to the exchange rather than the new fibre cabinet. This presumably means an Openreach engineer will have to visit to relocate the line to the cabinet. Now COVID-19 has intervened and we are told the new line in Achmore is unlikely to be available until June. We await a new date from Zen. **Action: Zen / Openreach**

### 5.3.2 Test the new line

### 5.3.3 Install external equipment at the hall

Phil will document a revised procedure to install the new link taking into account the delays caused by the poor weather.

We will endeavour to minimise disruption to existing subscribers. **Action: Phil**

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

### 5.3.5 Switch connection from Plockton to CMAchmoreHigh

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

### 5.3.7 Activate the new line

## 5.4 Subscribers

Live subscribers - 44

Waiting for installations / activation - 0

Waiting for subscriber's installation dates - 0

### 5.4.1 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.

The remaining installations are waiting on the completion of the testing of the new relays. See 10.3 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**

## 5.5 New MikroTik replacements for AirRouters

We will be using MikroTik routers for all the new subscribers' installations. **Action: Phil**

## 5.6 Terms of Reference

Deferred

# 6 Secretary's report

## 6.1 Risk register

No progress this month.

## 6.2 Long term support plan

Software to automate the cloning of failed devices - this month most effort has been directed to the coding required to automate the configuration of MikroTik units. The first unit has been successfully configured by the new software and is currently under test. However the creation of the second unit has revealed that the MikroTik backup and recovery functions are designed to provide "hardware" rather than "software" copies of units. More work will be required to remove some of the parameters relating to the hardware characteristics. **Action: Phil**

## 6.3 Terms of Reference

Deferred

## 7 Finance Director's Report

### 7.1 Monthly Statistics

<b>Revenue for March:-</b>			
<b>Brought forward</b>			
Balance		<b>£813.94</b>	
Creditors			£3,245.72
Debtors			£3,162.49
Net			£83.23
<b>Bank balance</b>			<b>£8,007.41</b>
<b>This month</b>			
Income	£398.00		
Expenditure	£389.82		
<b>P&amp;L</b>		<b>£8.18</b>	
Creditors			£177.00
Debtors			£9.59
Net			£167.41
<b>Adjusted P&amp;L</b>			<b>£175.59</b>
<b>Carried forward</b>			
Balance		<b>£822.12</b>	
Creditors			£3,422.72
Debtors			£3,172.08
Net			£250.64
<b>Bank balance</b>			<b>£8,183.00</b>
<b>Liabilities</b>			
Estimated Liabilities	-	£250.64	
Estimated balance after liabilities	-	£7,932.36	
<b>Provision for replacement of Electronic equipment</b>			
Total value purchased to date	-	£16,843.29	
Balance after provision	-	£-8,910.93	

Please note: In addition to the above liabilities we have also committed to take three lines from Zen for a minimum of 12 months at a cost of ~ £1,500

### 7.2 Next year's tariff

The total number of gigabytes sold was 8,400. The break even tariff for 2 fibre lines is 99 GB per £1, for 3 fibre lines is 66 GB per £1 and for 4 fibre lines is 49 GB per £1.

### 7.3 Outstanding subscribers' debt

Two accounts are in arrears.

### 7.4 Housekeeping

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

### 7.5 Payments for installations of subscriber's equipment

All payments are up to date.

### 7.6 Annual Accounts

Working from Georgie's monthly return spreadsheets Phil completed the annual accounts for year ending August 2019.

These were then used to create the returns for Companies House and HMRC. Draft copies of all these documents plus the return to the CIC regulator were circulated to the directors for their approval.

## 8 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**

### 8.1 Assets, bf, acquired, relinquished / written off, cf

No progress this month.

## 8.2 Liabilities

No progress this month.

## 8.3 Description of the Audit Trail

No progress this month.

# 9 Customer Relations

## 9.1 Production Environment

### 9.1.1 Problems and complaints

One customer again had problems with a faulty cable which reset their NanoStation, the connection was cleaned and the unit re-configured. It appears that water is somehow getting into the joint between the external cable and the internal power supply. It was decided to obtain some dielectric grease which hopefully will make the connection waterproof. The dielectric grease has been applied to the joint and we will see if that fixes the problem. **Completed**

### 9.1.2 Usage quotas

The monthly total for March was 5.1 TB a new record. The daily average was 164.5 GB a 17% increase in the daily average over February and another new record; with a peak usage of 274.5 on Wednesday 12<sup>th</sup> yet another record. CMNet peaks since operations started; highest daily usage - 274.5 GB, highest monthly usage - 5.1 TB. Four customers have exceeded their quota and have had their quotas increased. **Action: Phil**

### 9.1.3 Possible virus infection

No new instances of the Ubiquiti virus were detected; we will continue to run scans. **Action: Phil**

### 9.1.4 Installation of equipment

No new installations since the last minutes.

#### 9.1.4.1 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**

#### 9.1.4.2 Craig

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

#### 9.1.4.3 Achmore

It is suspected that there may be an issue with the Ethernet cable connection. This will be replaced at the first opportunity. No progress this month.

#### 9.1.4.4 North Strome

No progress this month.

#### 9.1.4.5 Braeindra

No problems.

#### 9.1.4.6 Other installations

Some small tasks are outstanding on the Creag Mhaol relays. No progress this month. **Action: Phil**

### 9.1.5 Customer Contracts

We will check that all changes to customer contracts and charges are now correct. **Action: Phil**

## 9.2 Changes for next month

### 9.2.1 Additional Management tools / reports

Management Reporting Software upgrades. No progress this month. **Action: Phil**

Software to check the configuration of equipment - a new version of this software is under test. **Action: Phil**

### 9.2.2 Potential personal safety issue

The new naming standard has been used for all the new installations. **Action: Phil**

### 9.2.3 Additional equipment for subscribers

No requests outstanding.

## 9.3 Volume trial

### 9.3.1 Review of the trial

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

## 9.4 Terms of Reference

Deferred

## 9.5 Problem reporting procedure

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

## 10 General topics

### 10.1 Documentation

#### 10.1.1 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**

### 10.2 Existing Relays

#### 10.2.1 Plockton

##### 10.2.1.1 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**

### 10.3 Backbone development

#### 10.3.1 Plockton

No issues.

#### 10.3.2 Lochcarron

No issues.

#### 10.3.3 Creag Mhaol

##### 10.3.3.1 Existing relays

No issues.

##### 10.3.3.2 New relays

No progress since the last report.

###### 10.3.3.2.1 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.

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.

There is a reported short circuit on the power supply to the Portchullin backup access point which needs investigation.

**Action: Phil, Mary, Neil**

#### 10.3.4 The Glen

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

#### 10.3.5 Ardaneaskan

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

#### 10.3.6 Leacanashie

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

#### 10.3.7 Portchullin (raised beach)

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

#### 10.3.8 Craig

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

#### 10.3.9 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**

#### 10.3.10 Strome Ferry

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

### 10.3.11 Ardnarff

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

### 10.3.12 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**

## 10.4 Testing

### 10.4.1 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**

## 10.5 Restoring power to the old TV repeater

### 10.5.1 Removal of old cable

No progress this month.

### 10.5.2 Protection of cable on the hill

All the cable on the hill has been buried but the routes still need to be marked.

### 10.5.3 Backup Generator

No progress this month.

## 10.6 ISPs

### 10.6.1 ADSL Broadband installation at Plockton High School

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

### 10.6.2 ADSL Broadband installation at Lochcarron

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

### 10.6.3 ADSL Broadband installation at Achmore

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

## 10.7 Implementations

10.7.1 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**

## 10.8 Company Logo

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

## 10.9 General Data Protection Regulation (Data Protection Act)

Nothing to report this month

# 11 Director's training session

## 11.1 Configuring Ubiquiti and MikroTik equipment

We will organise another training session for all directors

# 12 Next meeting

Date of next meeting Wednesday 13<sup>th</sup> May

The minutes were created from email exchanges during the week starting 6<sup>th</sup> April