

# Broadband Steering Group

Minutes of the Meeting held on the 25<sup>th</sup> September 2019 @ 7:30 p.m. Fernaig House

## 1 Present and Apologies

Present: Phil Game, Georgie Grimson, Joe Grimson, Mary MacBeth, Neil MacRae (part)

## 2 Approve and adopt previous minutes

The previous minutes for August, were proposed by Joe, seconded by Mary.

Copies of previous minutes are on our website at:-

<http://www.stromeferry-and-achmore.co.uk/index.asp?pageid=433827>

The website is “full” and so for the moment no new documents can be uploaded. The last minutes available are for June 2019. Email [cmnetcic@gmail.com](mailto:cmnetcic@gmail.com) if you have any questions.

## 3 Chairman’s report

### 3.1 Bandwidth

Since the last minutes there have been a couple of times when we have crept over the 65 Mbps threshold. We will continue to monitor the situation. **Action: Phil**

### 3.2 Firmware / False RADAR

There have been more incidents of false RADAR since the last report, but the number is greatly reduced. We have reconfigured the Braeintra access point to prevent it jumping to a frequency that reduces performance; for the moment the problem has been constrained. **Action: Phil**

### 3.3 New Backhaul Installation in Achmore Hall

3.3.1 Get a formal agreement approved and signed by the Hall Committee

We have now received a signed copy of the hosting agreement from the hall committee. **Completed**

3.3.2 Get quote for installation

Mary will contact Zen for a quote and lead time for the installation. **Action: Mary**

3.3.3 Install our cabinet and internal equipment in the hall

3.3.4 Install external equipment at the hall

3.3.5 Install new dish on CMAchmoreHigh for Plockton access

3.3.6 Switch connection from Plockton to CMAchmoreHigh

3.3.7 Install new dish on CMAchmoreLow for Achmore access

3.3.8 Get new line installed in the hall

3.3.9 Test the new line

3.3.10 Activate the new line

### 3.4 Subscribers

3.4.1 Existing relays

Live subscribers - 44

Waiting for installations / activation - 0

Waiting for subscriber’s installation dates - 1

3.4.2 Waiting for new backbone relays

Waiting for installations - 30

Leavers since the last minutes - 0

New joiners since the last minutes - 1

**Total - 76**

One installation is waiting on a date from the subscriber.

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 new relays. See 8.3

There was some debate about how to charge subscribers who did not commit to join prior to the end of the government grant who now have now changed their minds and decided to join. It was decided the cost of their equipment would be recovered through an additional monthly charge. Phil is to check the current cost of equipment and report back.

**Action: Phil**

### 3.5 New MikroTik replacements for AirRouters

No progress this month due to other commitments. **Action: Phil**

### 3.6 Terms of Reference

Deferred

## 4 Secretary's report

### 4.1 Electricity supply accounts

Mary has received three more bills to cover the period after Extra Energy went into administration and before Scottish power took over the accounts. These have been passed to Georgie to pay. **Action Georgie**

### 4.2 Risk register

No progress this month.

### 4.3 Long term support plan

Software to automate the cloning of failed devices - this is being rewritten so it can be used for any sort of device from any manufacturer in the future. **Action: Phil**

### 4.4 Terms of Reference

Deferred

## 5 Finance Director's Report

### Monthly Statistics

#### Revenue for August:-

##### Brought forward

Balance	<b>£3,482.14</b>		
Creditors		£741.97	
Debtors		£708.84	
Net			£33.13
<b>Bank balance</b>			<b>£9,680.95</b>

##### This month

Income	-£2,034.91		
Expenditure	£262.45		
<b>P&amp;L</b>	<b>-£2,297.36</b>		
Creditors		£2,524.00	
Debtors		£6.00	
Net			£2,518.00
<b>Adjusted P&amp;L</b>			<b>£220.64</b>

##### Carried forward

Balance	<b>£1,184.78</b>		
Creditors		£3,265.97	
Debtors		£714.84	
Net			£2,551.13
<b>Bank balance</b>			<b>£9,901.59</b>

### Liabilities

Estimated Liabilities	-	£2,551.13
Estimated balance after liabilities	-	£7,350.46

N.b. The exact amount to be refunded to subscribers will be calculated over the coming months as the figure above is an estimate. One invoice is outstanding for ~ £360 for trunking which we expect to be dated August, this has not been included in the figures above.

### Provision for replacement of Electronic equipment

Total value purchased to date	-	£16,843.29
Balance after provision	-	£ -9,492.83

Phil will update the monthly finance spreadsheet for the new financial year and issue it to Georgie before September's accounts are compiled. **Action: Phil**

All subscribers that will benefit from return of surplus funds have been notified and the first chequebook's worth of cheques have been written and are ready for dispatch. **Action: Phil, Mary, Joe, Georgie & Neil**  
The next batch of cheques will be signed and sent out at next month's meeting - assuming the new chequebook arrives.

**Action: Phil, Mary, Joe, Georgie & Neil**

### **5.1 Next year's tariff**

The total number of gigabytes sold was 7,550. The break even tariff for 2 fibre lines is 74 GB per £1, and for 3 fibre lines is 49 GB per £1.

Prior to the meeting Phil circulated figures showing income projected for the next financial year. The standing charge will remain the same at £5 to cover fixed costs. Our financial objective is to make a surplus contingency of ~ £1,000.

It is expected that the number of subscribers will increase significantly from 44 to over 70 in the next year and this will require additional capacity. Assuming one additional landline and new subscribers will have similar usage to existing subscribers the following figures were calculated:-

At £1per 50 GB we will make a £1,000 surplus with 54 subscribers

At £1per 75 GB we will make a £1,000 surplus with 62 subscribers

At £1per 100 GB we will make a £1,000 surplus with 75 subscribers

None of the figures above take into account any other income - e.g. from the New Joiner's Premium or growth from increased usage of existing subscribers..

It is clear that there is scope for a further reduction in the tariff in year six. However the timing of some events e.g. the installation of the additional capacity to coincide with demand from new subscribers might prove to be very difficult to manage. It was therefore decided that the year six rate reduction will be implemented by a subscription refund at the end of the financial year.

Therefore in July / August 2020 there will be a review of the financial position and at the director's discretion subscribers will be granted a subscription refund and / or a reduction in the New Joiner's Premium.

### **5.2 Outstanding subscribers' debt**

Excluding subscribers with quota increases there are no accounts in arrears.

### **5.3 Housekeeping**

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

### **5.4 Payments for installations of subscriber's equipment**

All payments are up to date.

### **5.5 Standing orders**

Two accounts are in credit, the relevant subscribers have been asked to correct their account. **Action: Georgie**

## **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**

During this month the system has suffered several incidents of False Radar contacts. These have affected mainly Braeintra. It is not fully understood why this is happening as the latest up- grades to the firmware were supposed to prevent this from occurring. The firmware was reverted to an earlier version but the problem persisted. It was then decided to change the access point from a NanoStation to a NanoBeam and this appears to have reduced the problem. Monitoring continues.

#### **7.1.2 Usage quotas**

The monthly total for August was 3.6 TB this is the highest ever recorded. The daily average was 116.2 GB; with a peak usage of 195.2 GB on Monday 5<sup>th</sup>, again the highest daily usage ever recorded.

Four customers exceeded their quota for the month and have had their quotas increased.

### 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

No installations since the last report.

#### 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

We are waiting on an installation date from one subscriber. **Action: Subscriber**

#### 7.1.4.4 North Strome

One subscriber has been asked to confirm they have line of sight. **Action: Subscriber**

#### 7.1.4.5 Other installations

Work has restarted on the Creag Mhaol relays now the Argocat is repaired. **Action: Phil**

### 7.1.5 Customer Contracts

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

## 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 different types of equipment - this program is being rewritten so it can be used to check configurations regardless of the manufacturer and simplify the process to replace faulty units **Action: Phil**

### 7.2.2 Potential personal safety issue

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

### 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**

### 8.1.2 Network Plan

The network plan for the new relays on Creag Mhaol and the Portchullin raised beach is being developed and tested. The network covering the new relays is being designed to be fault tolerate and automatically switch to preinstalled backup units. This will require extensive testing; due to the large number of units involved some testing will only be possible once the units have been installed in their final positions on the relays on Creag Mhaol. **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

##### 8.3.3.1.1 Braeintra AP

We have upgraded the access point to a different type of unit with a greater antenna gain and will monitor its performance. **Action: Phil, Joe**

#### 8.3.3.2 New relays

The CMS\_Intermediate power distribution relay has been built and the power relay enclosure installed.

The cable from CMA\_High to CMS\_Intermediate has been laid, its resin joints have been made and tested and it has been encased in trunking ready to be buried.

The cable from CMS\_Intermediate to CMS\_Low has been laid, encased in trunking and is ready to be buried

The cable from CMS\_Intermediate to CMS\_High has been laid, its resin joints have been made and tested and it has been encased in trunking ready to be buried.

The Leacanashie access points and New Lochcarron link have been installed at CMS\_High.

The Ardnarff access points have been installed at CMS\_Low.

Work has started on the configuration of equipment for relay to relay links.

##### 8.3.3.2.1 Next steps

Complete the configuration of equipment for relay to relay links.

Using a generator power supply install and test the units on CMS\_High and the link to the raised beach

Using a generator power supply install and test the units on CMS\_Low

Using a generator power supply install and test the links between CMS\_High, CMS\_Low and the raised beach

Encase the power cable from CMA\_Intermediate to CMA\_High in trunking

Encase the power cable from CMA\_Intermediate to CMA\_Low in trunking

Replace the CMA\_High router enclosure

Test the mains power supply to the new relays

Replace the CMA\_Low router enclosure

Test the new relay automated recovery algorithms

Install test equipment in Ardaneaskan East

Test the beam width of the Portchullin Access Point

**Action: Phil, Mary, Joe, Georgie, 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

Activation of the Ardaneaskan access point is waiting on the activation of the new Creag Mhaol relays. **Action: Phil**

### 8.3.6 Leacanashie

The line of sight to the new Strome High relay has been confirmed. Activation of the Leacanashie access point is waiting on the activation of the new Creag Mhaol relays. **Action: Phil**

### 8.3.7 Portchullin (raised beach)

The line of sight to the new Strome High relay has been confirmed. The Portchullin and Ardaneaskan East access points and backbone link to Creag Mhaol have been installed at the Portchullin raised beach relay. Activation of the Portchullin relay is waiting on the activation of the new Creag Mhaol relays. **Action: Phil**

### 8.3.8 Craig

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

### 8.3.9 North Strome

The line of sight to the new North Strome relay has been confirmed. Activation of the North Strome relay is waiting on the activation of the new Creag Mhaol relays. **Action: Phil**

### 8.3.10 Ardnarff

The line of sight from Ardnarff to the new Creag Mhaol relay has been confirmed. **Action: Phil**

### 8.3.11 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

No progress this month.

### 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 will make sure we can proceed with the order for an additional line when we need the extra capacity. **Action: Mary, Joe, Phil**

## 8.7 Implementations

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

Work on the new relays on Creag Mhaol has restarted now the Argocat is back in action. **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 16<sup>th</sup> October

The meeting closed at 9:00 pm