

# Broadband Steering Group

Minutes of the Meeting held on the 21<sup>st</sup> August 2023 @ 7:30 pm at Fernaig House

## 1 Present and Apologies

Present: Phil Game, Mary MacBeth, Kath Smith with contributions from Neil MacRae outside the meeting.

## 2 Approve and adopt previous minutes

The previous minutes for July 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

### 3.1 Bandwidth

The very high capacity link to Achmore Hall has no bottlenecks and the performance statistics from this link are helping us understand the results from other links. We will look at amending our own software to provide information covering peak usage over a 15 second period rather than the current instantaneous peaks.

Again, this month, a considerable amount of time has been spent reducing the amount of information coming from the system in the hope that things will become clearer; there is still more to do. **Action: Phil**

### 3.2 False RADAR

We have purchased additional materials to complete an intermediate mount that will allow us to make micro adjustments to the dish alignment. **Action: Phil**

Analysis of the configuration of the new 60 GHz units shows that they have many new parameters. This now takes us over a couple of dozen different pro formas to use for the different combinations of hardware and the way it is used.

There are currently around 200 devices each with unique configurations which need to be kept up to date. It has therefore been decided it is time to change the way we set up and verify configurations to identify common parameters to reduce the duplication and make future enhancements simpler. Work continues to rationalise the pro formas.

**Action: Phil**

There have been a few of false RADAR events in the last month. Switching to alternate frequencies has reduced the incidents further. Where it is possible we will upgrade the vital links (e.g. relay to relay) to 60 GHz to eliminate the FR events. **Action: Phil**

### 3.3 Subscribers

Live subscribers	- 63
Waiting for activation	- 0
Waiting for subscriber's confirmation of details / deposits	- 0
Pending installations	- 0
Waiting for installations	- 8
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
<b>Total</b>	<b>- 71</b>

No new installations were completed this month.

We have had requests for connections in Lochcarron, Strathcarron and Balnacra; once our existing commitments have been met we will see if these are feasible and schedule the work. **Action: Phil**

We have had request to provide a 4G service to boost mobile coverage; once our existing commitments have been met we will see if this is feasible and schedule the work. Mary to check if this is still needed. **Action: Mary**

### 3.4 New equipment

More work is required to the email client to filter incoming messages on the support laptop. No progress this month.

**Action: Phil**

We will also add our monitoring software so it can be used as a backup for the server should that fail. No progress this month. **Action: Phil**

We are still waiting for one item outstanding item to be delivered. **Action: Phil**

## 4 Secretary's report

### 4.1 Risk register

No progress this month.

#### 4.2 Long term support plan

We have adapted our software to work with the “AC Gen 2” units; we are looking at options to clone replacements devices remotely and in due course will look for volunteers at “remote” sites to hold spares. **Action: Phil**

#### 4.3 Broadband in Achmore Hall

We will meet with the Hall committee at their September meeting to define their requirements. **Action: Neil**

#### 4.4 Electricity price increases

In the light of the recent increases in electricity charges it was decided to review the amounts paid for hosting relays and to increase payments. **Action: Phil**

#### 4.5 Zen / Plusnet price increases

Our Plusnet contract has now reached the end of its term. As Plusnet are no longer selling new business grade services we cannot enter into a new fixed term contract. However the current charge is quite competitive and so we will stay with Plusnet for the moment. Plusnet have also written to us to state that Openreach will no longer provide voice as well as data on our connection. This does not affect us as we only use the connection for broadband. **Completed**

### 5 Finance Director's Report

#### 5.1 Monthly Statistics

##### Revenue for July

##### Brought forward

Balance	<b>£169.57</b>			
Creditors		£19,452.80		
Debtors		£18,906.69		
Net			£546.11	
<b>Bank balance</b>				<b>£8,463.65</b>

##### This month

Income	£579.21			
Expenditure	£506.23			
<b>P&amp;L</b>	<b>£72.98</b>			
Creditors		£97.47		
Debtors		£90.81		
Net			£6.66	
<b>Adjusted P&amp;L</b>				<b>£79.64</b>

##### Carried forward

Balance	<b>£242.55</b>			
Creditors		£19,550.27		
Debtors		£18,997.50		
Net			£552.77	
<b>Bank balance</b>				<b>£8,543.29</b>

#### 5.2 Outstanding Expenses Claims

One claim is outstanding for ~ £8

#### 5.3 Last year's surplus

There is one NJP rebate cheque that has not yet been cashed. **Action: Subscriber**

#### 5.4 This year's surplus

We are on target to make a surplus of ~ £700 this financial year; there was some debate as to how we should use the money.

It was decided the amount was too small to use for a NJP refund.

We therefore looked a possible equipment upgrades it was decided we would investigate the upgrade of some of the radios on Creag Mhaol to 60 GHz to eliminate the risk of false RADAR events and to increase capacity. The upgrade is dependent on checking the suitability and availability of candidate radios. **Action: Phil**

It was noted that the range of 60 GHz radios was expanding all the time and the apparent distance limitations now seem to have been overcome. However as the radios are going through rapid development there is a risk that the current standards will become redundant in a very short period of time. In general 60 GHz is still much more expensive than 5 GHz.

It was also agreed that a second support laptop would be an advantage. This would allow all directors to be able to monitor the system without having to keep transferring the laptop. **Action: All**

At the moment we have enough subscribers' routers in stock to cover any failures.

We will restock some consumables (RJ45 plugs) and spare cables. **Action: Phil**

### **5.5 Next year's tariff**

The total number of gigabytes sold was 24,900, which makes the break even tariff for 3 fibre lines 211 GB per £1 and for 4 fibre lines 171 GB per £1.

### **5.6 Outstanding subscribers' debt**

All accounts are up to date.

### **5.7 Housekeeping**

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

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

All payments are up to date.

## **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**

There have been a series of power cuts since the last report; all units came back online each time power was restored.

#### **7.1.1 Issues raised by Subscribers**

##### **7.1.1.1 How can subscribers contact CMNet when the internet is down?**

We will investigate the options; ideally the CMNet support team needs to receive problem reports via email so our initial investigations will be whether voice mails can be forwarded via email. No progress this month.

##### **7.1.1.2 Fernaig**

No issues

##### **7.1.1.3 Achmore**

No issues

##### **7.1.1.4 The Glen**

No issues

##### **7.1.1.5 Braeintra**

One subscriber has reported poor performance - this is down to obstructions in the line of sight of the subscriber's antenna. **Action: Subscriber**

##### **7.1.1.6 Craig**

We have asked a subscriber to check the line of sight for obstructions. **Action: Subscriber**

##### **7.1.1.7 Ardaneaskan East**

No issues

##### **7.1.1.8 Ardaneaskan West**

No issues

##### **7.1.1.9 Leacanashie**

No issues

##### **7.1.1.10 North Strome**

One subscriber is having issues preventing the installation of a whole house Wi-Fi system. We paid a visit and ran scans of Wi-Fi signal strength at various locations and looked at various options. Phil will set up and test a Wi-Fi repeater as one of the options. **Action: Phil**

##### **7.1.1.11 Strome Ferry**

No issues

#### 7.1.1.12 *Ardnarff*

Poor speeds between buildings have been traced to mains LAN extenders not connecting properly probably caused by “noise” on the mains power these will be replaced with radios to link the buildings. We delivered another bracket and fitting for the subscriber to install. **Action: Subscriber**

#### 7.1.2 *Usage quotas*

The monthly total for July was 10.4 TB, the daily average was 335 GB, with a peak usage of 478 GB on Sunday 16<sup>th</sup>. CMNet peaks since operations started; highest average daily usage 345 GB, highest single days usage - 708 GB, highest monthly usage - 10.7 TB.

One subscriber exceeded their quota in July.

#### 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 *Planned upgrades of equipment*

##### 7.1.4.1 *Fernaig*

The access point will be configured and installed now we have received stocks from our suppliers. **Action: Phil**

##### 7.1.4.2 *Achmore*

The access point will be configured and installed now we have received stocks from our suppliers. **Action: Phil**

##### 7.1.4.3 *The Glen*

A new unit has been configured to replace the dish on Creag Mhaol; it and a backup will be installed when weather permits. **Action: Phil.**

##### 7.1.4.4 *Braeintra*

The access point will be configured and installed now we have received stocks from our suppliers. **Action: Phil**

##### 7.1.4.5 *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**

##### 7.1.4.6 *Ardaneaskan East*

The access point will be configured and installed now we have received stocks from our suppliers. **Action: Phil**

##### 7.1.4.7 *Ardaneaskan West*

No issues

##### 7.1.4.8 *Leacanashie*

The access point will be configured and installed now we have received stocks from our suppliers. **Action: Phil**

##### 7.1.4.9 *North Strome*

The access point will be configured and installed now we have received stocks from our suppliers. **Action: Phil**

##### 7.1.4.10 *Strome Ferry*

No issues

##### 7.1.4.11 *Ardnarff*

No issues

#### 7.1.5 *Backbone relays*

##### 7.1.5.1 *Plockton*

We will check the installation and apply a second coat of paint to the school wall. **Action: Phil & Mary**

##### 7.1.5.2 *Achmore*

The Plusnet router will be replaced with something more suitable. No progress this month. **Action: Phil**

The 60 GHz dish mount will be upgraded. **Action: Phil**

##### 7.1.5.3 *Lohcarron*

No issues.

##### 7.1.5.4 *Other relays*

No issues.

#### 7.1.6 *System monitoring servers*

The MikroTik server (“The Dude”) is having its database rebuilt (again!) - The newly installed equipment has been set up but there is still more work to do. It appears that when the system is backed up the logs are cleared down thus making it difficult to trace yesterday’s problems. We will investigate backing up the logs!! **Action: Phil**

#### 7.1.7 *Documentation*

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**

### 7.1.8 Customer Contracts

Some contracts are outstanding, we will chase subscribers. **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 and simplify the configuration of backup units. **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

Nothing to report

## 7.3 Volume trial

### 7.3.1 Review of the trial

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

## 7.4 Terms of Reference

Deferred

# 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 Backbone development

### 8.2.1 New relays

#### 8.2.1.1 Completed

No progress this month.

#### 8.2.1.2 Next steps

The new relay automated recovery algorithms are being tested (some rather unexpectedly)

The buried mains power cables need to be permanently marked and documented. **Action: All**

#### 8.2.1.2.1 Portchullin (raised beach)

The Portchullin enclosures will be upgraded. **Action: Phil**

Re-align the existing Portchullin Access Point

Install test equipment in Portchullin

#### 8.2.1.2.2 Reraig

We are waiting for a subscriber to provide details of the land they own so we can determine where to install their relay.

**Action: Subscriber**

## 8.3 Testing

### 8.3.1 Management & accounting software

Nothing to report

## 8.4 Restoring power to the old TV repeater

### 8.4.1 Removal of old cable

No progress this month.

### 8.4.2 Protection of cable on the hill

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

### 8.4.3 Backup Generator

No progress this month.

## 8.5 ISPs

No issues

## 8.6 Implementations

### 8.6.1 Phase 3

#### 8.6.1.1 Ardaneaskan East

All installations have been completed.

#### 8.6.1.2 *Ardnarff*

One installation needs to be upgraded. **Action: Subscriber**

#### 8.6.1.3 *Strome Ferry*

One installation is waiting to be scheduled. **Action: Subscriber**

#### 8.6.1.4 *North Strome*

All installations have been completed.

#### 8.6.1.5 *Achmore*

One installation is waiting to be scheduled. **Action: Subscriber**

#### 8.6.1.6 *Portchullin*

New enclosures have been purchased to act as replacements for the corroded units. **Action: Phil**

#### 8.6.1.7 *Craig*

All installations have been completed.

8.6.2 *Phase 4 - Further investigations / backbone development required.*

#### 8.6.2.1 *Ardaneaskan West*

#### 8.6.2.2 *Reraig*

#### 8.6.2.3 *Lohcarron*

#### 8.6.2.4 *Strathcarron*

### 8.7 *Company Logo*

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

### 8.8 *General Data Protection Regulation (Data Protection Act)*

We will review our GDPR policy. **Action: Mary**

## 9 **Director's training session**

### 9.1 *Configuring Ubiquiti and MikroTik equipment*

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

## 10 **AoB**

## 11 **Next meeting**

Monday 18<sup>th</sup> September

The meeting finished at 8:50 pm