

# Broadband Steering Group

Minutes of the Meeting held on the 13<sup>th</sup> October 2021 @ 7:30 pm

## 1 Present and Apologies

Present: Phil Game, Mary MacBeth, Kath Smith, Neil MacRae

## 2 Approve and adopt previous minutes

The previous minutes for September, 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

A considerable amount of time has been spent working on the NJP rebates and accounts; this has impacted the time available for other tasks.

### 3.1 Bandwidth

To increase capacity we are investigating possibilities in Lochcarron and Achmore. Mary has started a dialogue with the Shinty Club in Lochcarron and will forward them more details. **Action: Mary**

### 3.2 False RADAR

We have been working to eliminate conflicts between radios and have had some success. Although we are still seeing false RADAR events we have been able to reduce the "domino effect" where one radio's frequency hop impacts another. More work is required in this area. **Action: Phil**

### 3.3 Subscribers

Live subscribers	- 53
Waiting for installations / activation	- 1
Waiting for subscriber's confirmation of details	- 0
Pending installations	- 5
Waiting for installations	- 12
Leavers since the last minutes	- 0
New joiners since the last minutes	- 0
<b>Total</b>	<b>- 71</b>

As we will need to return to North Strome to continue work on the Strome Ferry relay we will take the opportunity to complete the newly requested installations in North Strome and Leacanashie. **Action: Phil**

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

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**

See section 8.7 for more details on implementations

## 4 Secretary's report

### 4.1 Risk register

No progress this month.

### 4.2 Long term support plan

Software to automate the cloning of devices - this software is currently being updated to work with the newly purchased "AC Gen 2" units so that they can be used in Strome Ferry. **Action: Phil**

### 4.3 Access to the bank account

After some discussion it was decided that the best way to give Mary "admin" access to the bank account would be for Mary to have bank signatory status without online access. Mary will start the process; arrange for the resolution to be put to the board, complete the relevant forms and then pass the forms to Kath to submit to the bank. **Action: All**

### 4.4 Electricity account

Mary has obtained a new set of meter readings and calculated the predicted usage and costs for Kath to use in the accounts. Our charges will be ~£50 per month, mostly from the standing charges. **Action: Kath**

## 5 Finance Director's Report

### 5.1 Monthly Statistics

#### Revenue for September

##### Brought forward

Balance			
Creditors		£9,699.44	
Debtors		£5,118.83	
Net			£4,580.61
<b>Bank balance</b>			<b>£11,773.36</b>

##### This month

Income	£502.50		
Expenditure	£111.58		
<b>P&amp;L</b>		<b>£390.92</b>	
Creditors		£103.34	
Debtors		£2,840.46	
Net			-£2,737.12
<b>Adjusted P&amp;L</b>			<b>-£2,346.20</b>

##### Carried forward

Balance		<b>£390.92</b>	
Creditors		£9,802.78	
Debtors		£7,959.29	
Net			£1,843.49
<b>Bank balance</b>			<b>£9,427.16</b>

### 5.2 Last year's surplus

The second batch of subscribers to receive cheques refunding a portion of the New Joiner's Premium has been agreed and will be dispatched within the next few days. **Action: Kath, Neil, Phil & Mary**

Subscribers have been notified of any outstanding issues and cheques will not be issued until these have been resolved.

**Action: Subscribers**

### 5.3 Outstanding Expenses Claims

All expense claims are up to date.

### 5.4 Next year's tariff

The total number of gigabytes sold was 14,250. The break even tariff for 3 fibre lines is 128 GB per £1 and for 4 fibre lines 103 GB per £1.

### 5.5 Outstanding subscribers' debt

There are too many anomalies this month to provide a meaningful figure. The anomalies are mostly caused by outstanding changes relating to the NJP refund. All affected subscribers have been sent emails asking them to adjust their payments.

Phil thanked Kath for her efforts this month as she has had to spent a lot of time setting up the new year's accounts and reconciling the figures.

### 5.6 Housekeeping

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

### 5.7 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

We are still seeing sporadic problems with the Achmore access point. **Action: Phil**

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

Drop outs in Craig - we have not recorded any drop outs for several months; however we will continue to monitor the link. **Action: Phil**

We continue to hold the Lochcarron gateway in reserve should there be a need to increase capacity.

The MikroTik server ("The Dude") is having its database rebuilt - the newly installed equipment has been set up but there is still more work to do. **Action: Phil**

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**

The damaged Strome Low relay dish that connects to Achmore High will be recovered when we next schedule work on Creag Mhaol. **Action: Phil**

The Creag Mhaol dish that connects to Ardaneaskan West that was replaced after storm damage is showing some slight dips in signal strength. This is probably due to a damaged housing, the housing will be replaced when we next schedule work on Creag Mhaol. **Action: Phil**

A series of power cuts (some planned, some not planned) caused interruptions to the service. Manual intervention was required to reset some units because automatic recovery of units after a power cut has been temporarily disabled whilst false RADAR events are being investigated. **Action: Phil**

### 7.1.1 Usage quotas

The monthly total for September was 7.1 TB. The daily average was 237 GB (new record), with a peak usage of 378 GB (new record) on Saturday 11<sup>th</sup>.

CMNet peaks since operations started; highest average daily usage 237 GB, highest single days usage - 378 GB, highest monthly usage - 7.1 TB.

One subscriber exceeded their quota and has had their contract amended accordingly.

### 7.1.2 Possible virus infection

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

### 7.1.3 Installation of equipment

#### 7.1.3.1 Achmore

Nothing to report

#### 7.1.3.2 Ardaneaskan East

Nothing to report

#### 7.1.3.3 Ardaneaskan West

Nothing to report

#### 7.1.3.4 Ardnarff

Nothing to report

#### 7.1.3.5 Braeintra

We will configure and install backup units for the Achmore side relays as soon as time permits. **Action: Phil.**

#### 7.1.3.6 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**

#### 7.1.3.7 North Strome

Nothing to report

#### 7.1.3.8 Strome Ferry

Raising the height of the new "AC" subscriber's antenna has shown a marginal improvement in the throughput. Although we are still seeing the signal drop as the tide rises and falls the lowest throughput recorded has risen from ~ 160 Mbps to 200 Mbps. If this figure can be maintained there should be no discernible drop in performance for subscribers in Strome Ferry regardless of the state of the tide. However we still need to trial the corresponding updated unit in North Strome to ensure we have the correct signal coverage for all properties in Strome Ferry. **Action: Phil**

### 7.1.3.9 *Other installations*

Nothing to report

### 7.1.4 *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 - 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*

Ardaneaskan - One site has requested a scan / trial for whole house Wi-Fi.

## 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*

A trial WhatsApp group has been set up by Mary - testing is continuing amongst directors. **Action: All**

# 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*

We will check the installation and apply a second coat of paint to the school wall, looks like we missed the summer break. **Action: Phil & Mary**

### 8.2.2 *Achmore*

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

The test the maximum speed that the radio link from Achmore Hall to Creag Mhaol will support the router in Achmore Hall will need to be upgraded. At the moment it has “only” 100 Mbps Ethernet ports and it is expected that the radio link will be able to run well over this speed. However we test the speed from router to router so the 100 Mbps port on the Achmore Hall router would be the limiting factor. We will therefore replace the router with one that can support 1 Gbps Ethernet ports; we have a suitable router “in stock”. The corresponding router on Creag Mhaol has already been upgraded. No progress this month. **Action: Phil**

### 8.2.3 *Lochcarron*

Link capacity testing is required. **Action: Phil**

We will install a Raspberry Pi micro computer to facilitate gateway line speed tests. **Action: Phil**

### 8.2.4 *Other relays*

No issues.

## 8.3 *Backbone development*

### 8.3.1 *New relays*

#### 8.3.1.1 *Completed*

No progress this month.

#### 8.3.1.2 *Next steps*

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

Re-align the existing Portchullin Access Point

Add an additional Portchullin Access Point

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

Install one subscriber’s test equipment in Portchullin

Install backup equipment on Achmore High and Achmore Low relays

**Action: All**

#### 8.3.2 [The Glen](#)

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

#### 8.3.3 [Ardaneaskan East](#)

Nothing to report

#### 8.3.4 [Leacanashie](#)

Nothing to report

#### 8.3.5 [Portchullin \(raised beach\)](#)

The Portchullin access points will be upgraded. **Action: Phil**

#### 8.3.6 [Craig](#)

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

#### 8.3.7 [North Strome](#)

Nothing to report

#### 8.3.8 [Strome Ferry](#)

Nothing to report

#### 8.3.9 [Ardnarff](#)

Nothing to report

#### 8.3.10 [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](#)

Nothing to report.

### 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*

No issues

### 8.7 *Implementations*

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

##### 8.7.1.1 [Ardaneaskan East](#)

Equipment has been configured for two more installations which are pending. **Action: Phil, Mary & Ken**

No further installations are waiting to be scheduled.

##### 8.7.1.2 [Strome Ferry](#)

We are experiencing some reduction in throughput due to the tides. We are testing alternative equipment to determine the best combinations before commencing the full roll out of installations. **Action: Phil, Neil**

##### 8.7.1.3 [Leacanashie](#)

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

##### 8.7.1.4 [North Strome](#)

Two installations are waiting to be scheduled. **Action: Phil**

##### 8.7.1.5 [Achmore](#)

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

##### 8.7.1.6 [Portchullin](#)

The enclosures at Portchullin have been measured so replacements can be prepared. **Action: Phil**

8.7.2 Phase 4 - Further investigations / backbone development required.

8.7.2.1 *Ardaneaskan West*

8.7.2.2 *Ardnarff*

8.7.2.3 *Reraig*

8.7.2.4 *Lohcarron*

8.7.2.5 *Strathcarron*

## 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*

A training session was scheduled to follow the meeting; more will follow in the coming months.

## 10 **Next meeting**

Date of next meeting Wednesday 10<sup>th</sup> November 19:30.

The meeting finished at 20:45