# **Broadband Steering Group**

Minutes of the Meeting held on the 11th March 2020 @ 7:00 p.m. Fernaig House

# 1 Present and Apologies

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

# 2 Approve and adopt previous minutes

The previous minutes for February, were proposed by Neil, seconded by Mary Copies of previous minutes are on our website at:-

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

# 3 Chairman's report

Another month of poor weather has meant no progress on outdoor tasks and again efforts have been concentrated elsewhere.

#### 3.1 Bandwidth

The link to Plockton is now mostly operating normally and this is further evidence that last month's problems were due to the mix of traffic being processed. We expect problems of this type to be resolved when we upgrade to the new faster dishes.

The Plockton line is now very close to full capacity, at times showing periods where downloads exceed 70 Mbps. As a temporary measure to aid throughput the maximum download speed has been reduced from 30 Mbps to 20 Mbps. This will only affect subscribers who are downloading very large files. The new line in Achmore will restore spare capacity.

#### 3.2 Firmware / False RADAR

We are still seeing some false RADAR events but the number has been greatly reduced. At the moment we are recording each incident and will analyse the data gathered in due course. **Action Phil** 

#### 3.3 Server Problems

There have been three incidents of the server rebooting since the last report. We will clear down the server hard disk and run a disk analysis and repair. Action Phil

#### 3.4 New Backhaul Installation in Achmore Hall

3.4.1 Install our cabinet and internal equipment in the hall

The new mains sockets have been wired up. Completed

3.4.2 Install external equipment at the hall

Phil will document a revised procedure to install the new link taking into account the disruption caused by the poor weather. We will endeavour to minimise disruption to existing subscribers. **Action Phil** 

- 3.4.3 Install new dish on CMAchmoreHigh for Plockton access
- 3.4.4 Switch connection from Plockton to CMAchmoreHigh
- 3.4.5 Install new dish on CMAchmoreLow for Achmore access
- 3.4.6 Get new line installed in the hall

Mary has ordered the new line from Zen - installation is due on the 17<sup>th</sup> March. Action Zen / Openreach

- 3.4.7 Test the new line
- 3.4.8 Activate the new line

#### 3.5 Subscribers

Live subscribers	- 44
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.

4.4

The remaining installations are waiting on the completion of the testing of the new relays. See 8.3 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** 

### 3.6 New MikroTik replacements for AirRouters

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

### 3.7 Terms of Reference

Deferred

# 4 Secretary's report

### 4.1 Risk register

No progress this month.

#### 4.2 New Zen Contracts

Mary has contacted Zen and arranged that the two existing lines will benefit from the new reduced tariff which is 20% cheaper than the old rate but does commit us to stay with Zen for another 12 months. **Completed** 

#### 4.3 New backhaul installation in Achmore hall

Mary has ordered the new line. Completed

### 4.4 Long term support plan

Software to automate the cloning of failed devices - the poor weather has again meant a lot of work has been done on this software since the last report. We have now defined a standard configuration for all AirGateways and made good progress on a standard definition for subscribers' antenna. Work has started on the coding required to automate the configuration of MikroTik units. **Action: Phil** 

### 4.5 Terms of Reference

Deferred

# 5 Finance Director's Report

### 5.1 Monthly Statistics

### Revenue for February:-

D	C 1
<b>Brought</b>	iorward

210481111111111					
Balance		£712.32			
Creditors			£3,104.32		
Debtors			£2,961.90		
Net				£142.42	
Bank balance					£7,964.98
This month					
Income	£391.00				
Expenditure	£289.38				
P&L		£101.62			
Creditors			£141.40		
Debtors			£200.59		
Net				-£59.19	
Adjusted P&L					£42.43
Carried forward					
Balance		£813.94			
Creditors			£3,245.72		
Debtors			£3,162.49		
Net				£83.23	
Bank balance					£8,007.41

#### Liabilities

Estimated Liabilities - £83.23 Estimated balance after liabilities - £7,924.18

#### Provision for replacement of Electronic equipment

Total value purchased to date - £16,843.29 Balance after provision - £-8,919.11

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  $\sim £1,500$ 

Phil has amended the finance spreadsheet to account to allow journal entries to document cash transfers between income and expenditure. **Completed** 

#### 5.2 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.

## 5.3 Outstanding subscribers' debt

No accounts are in arrears.

### 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

All payments are up to date.

#### 5.6 Standing orders

All subscribers' accounts are correct.

### 5.7 Subscriber's subscription rebates

All cheques have now been cashed. 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

It has been suggested that we should set up a separate email account for subscribers to report problems. All present thought that the existing account <a href="mailto:cmmetcic@gmail.com">cmmetcic@gmail.com</a> would suffice. Phil is to circulate contact details to all subscribers. Action: Phil

The system performed reasonably well throughout the month although we are still seeing false radar detections on occasions.

One customer reset their AirRouter and the unit had to be re-configured, it was also found that a faulty cable had reset their NanoStation, the cable was repaired and the unit re-configured.

One customer reported loss of service, the resulting investigation found that the associated Access Point had jumped frequency to a lower power band which reduced the signal strength. The correct frequency was set and service restored.

#### 7.1.2 Usage quotas

The monthly total for February was 4.075 TB (a new record) which equates to 4.365 for a 31 day month. The daily average was 140.5 GB; with a peak usage of 187.9 GB on Wednesday 12<sup>th</sup>.

CMNet peaks since operations started; highest daily usage - 230.8 GB, highest monthly usage - 4.075 GB.

Two customers have exceeded their quotas and have had their quota 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

No new installations since the last minutes.

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

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.

7.1.4.4 North Strome

No progress this month.

7.1.4.5 Braeintra

No problems.

7.1.4.6 Other installations

Some small tasks are outstanding on the Creag Mhaol relays. No progress this month. 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 equipment - a new version of this software is under test. 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 due to adverse weather conditions, there has now been some rain every day for a contiguous period of over 60 days

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.

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

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

We are now ready to 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 new line to be installed. Action: Mary, Neil, Phil

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> April The meeting closed at 7:45 pm