Broadband Steering Group

Minutes of the Meeting held on the 8th August 2018 @ 7:30 p.m. Fernaig House

1   Present and Apologies

Present: Phil Game, Georgie Grimson, Joe Grimson Mary MacBeth
Apologies: Neil MacRae

2   Approve and adopt previous minutes

The previous minutes for July 2018, 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

Email cmnetcic@gmail.com if you have any questions.

3   Chairman's report

3.1   Bandwidth

On the evening of the 31st July the system came under stress and download and upload speeds were considerably reduced. Subscribers' may have noticed some buffering if watching video. This was caused by several lengthy, heavy downloads being run simultaneously. Speeds recovered as soon as the downloads had finished.

There was some debate as to whether we should start to use the Lochcarron line now and it was decided we should not for the moment as it is better to concentrate on building the new relays. However if there are more performance problems we will divert resources to utilise the "spare" Lochcarron line.

3.2   System Issues

Gmail responses have improved and are no longer causing a problem so this topic will be closed. **Closed**

3.3   Subscribers

3.3.1   Existing relays

Live subscribers	- 40
Subscriber installation under test	- 1
Waiting for subscriber to clear their line of sight	- 1
Waiting for subscriber's installations	- 1

3.3.2   Waiting for new backbone relays

Waiting for installations	- 31
Leavers since the last minutes	- 0
New joiners since the last minutes	- 1
Total	**- 74**

One subscriber installation is waiting for vegetation obscuring the line of sight to be removed before it can be fully tested.
One installation is waiting for the subscriber to complete their pre-installation work.
One subscriber installation is still under test as this is the first low level link across sea and is likely to need further tuning.

3.4   New MikroTik replacements for AirRouters

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

3.5   Terms of Reference

Deferred

4   Secretary's report

4.1   Risk register

We will continue to chase the Hall Committee for confirmation we will be able to install our equipment in the hall and follow Openreach progress. **Action: Mary**

4.2   Long term support plan

Software to automate the cloning of failed devices - as part of the process of configuring equipment for new subscribers we have tested that the new software can automate the update of configurations. On a limited set of tests this has worked well and so when time permits we will be able to provide a fully automated system. **Action: Phil**

4.3   Terms of Reference

Deferred

5 Finance Director's Report

5.1 Monthly Statistics

Revenue for July:-
  Brought forward

Balance	**-£2,432.40**			
Creditors		£104.52		
Debtors		£94.02		
Net			£10.50	
Bank balance				**£6,272.41**

  This month

Income	£402.00			
Expenditure	£855.62			
P&L	**-£453.62**			
Creditors		£3.00		
Debtors		£6.00		
Net			-£3.00	
Adjusted P&L				**-£456.62**

  Carried forward

Balance	**-£2,886.02**			
Creditors		£107.52		
Debtors		£100.02		
Net			£7.50	
Bank balance				**£5,815.79**

Liabilities

Estimated Liabilities	-	£0
Estimated balance after liabilities	-	£5,815.78

Provision for replacement of Electronic equipment

Total value purchased to date	-	£15,000.00
Balance after provision	-	£ -9,184.21

All outstanding claims have now been settled and directors were repaid approximately £650 this month.

5.2 Year five tariff

The total number of gigabytes **sold** was 2,680; the break even tariff for 2 fibre lines is £0.77 per 20 GB, and for 3 fibre lines is £1.15 per 20 GB.

The total number of gigabytes **committed,** i.e. the likely total when the new joiners finish their trial period is 3,060 GB; using this figure the break even tariff for 2 fibre lines is £0.67 per 20 GB, and for 3 fibre lines is £1 per 20 GB.

There was some debate about this year's review of tariff rates and it was decided that we would keep the quota increment at 20GB. There are 9 subscribers on 20 GB which is 25% of the total number of subscribers.

We will therefore prepare projections for next year's tariff based on a standing charge per installation and a rate per 20GB. **Action: Phil**

If there is a change in the tariff it will come into effect on the 1st December as it has in previous years.

5.3 Outstanding subscribers' debt

Excluding subscribers with quota increases one account is in arrears. **Action: Georgie, Phil**

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

One account is in credit, the relevant subscriber has been asked to correct their account. **Action: Georgie, Phil**

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

The system has mostly been running smoothly this month with no major problems apart from performance on the 31st.

Joe is still having problems updating firmware, this is not a high priority to fix and will be addressed in due course. **Action: Phil, Joe**

Two customers in Braeintra are experiencing poor signal levels; we will try a hardware upgrade to the Braeintra access point. No progress this month. **Action: Phil, Joe**

There have been no problems with the server this month so it looks like it was the rogue process that was causing the spontaneous reboots. **Closed**

The NanoStation with the flash memory problem gave up the ghost and was replaced. **Completed**

There have been several reports in the Ardaneaskan and Craig logs of RADAR being detected causing radios to shift channels due to the Ofcom rules. This causes a loss of service for several minutes whilst the radios "listen" to make sure the new channel is clear. It is quite possible that these are false positives and we will adjust frequencies and power and monitor the results. **Action: Phil**

Ubiquiti software upgrade - offline units will be upgraded when they next come online. **Action: Phil**

There have been no more unknown "local" IP addresses recorded since we disabled external access. **Completed**

7.1.2 Usage quotas

The monthly total for July was 1.94 TB, with a daily average of 62.48 GB; a very large increase on the previous month, the peak usage was _**139.7 GB**_ on Tuesday 31st. 139.7 GB is by far the highest daily usage ever recorded and it did cause some performance problems.

Two subscribers exceeded their quota and have been moved to the appropriate band.

7.1.3 Possible virus infection

Some instances of the Ubiquiti virus were detected on new equipment; it seems likely that this is a false reading caused by upgrading the firmware. However we will continue to run scans and clean the "infections". **Action: Phil**

Our monitoring software detected a likely virus infection in one subscriber's equipment; they have been informed and they are investigating the issue. We are waiting for their feedback. **Action: Phil**

7.1.4 Installation of equipment

One customer has had his equipment installed but is yet to be connected. The access point in Ardaneaskan has been re-aligned and we are now waiting for the subscriber to clear the line of sight of undergrowth. **Action: Subscriber, Phil, Joe**

One subscriber in Ardaneaskan has been given a bracket ready to install. **Action: Subscriber, Phil, Joe**

7.1.4.1 Achmore and Craig Subscribers installations

Sequence of work:-

1) Set up a test radio to link from Craig to Ardaneaskan **Completed**
2) Re-align / reconfigure the Ardaneaskan relay to support Craig and the current Ardaneaskan subscribers. **Completed**
3) Complete the pending installation in Ardaneaskan. **Waiting on the subscriber**
4) If necessary re-tune or upgrade the Craig installation. Once Ardaneaskan was reconfigured we retested the link and decided to upgrade the dish in Craig. Since then the link has been stable and useable but it is showing periods when the throughput drops very close to our lower threshold limit. We have now upgraded the dish to one with a later chip and are monitoring the link to see if that will give more leeway. **Action: Phil, Joe**
5) Provide brackets and advice for anyone that will do their own installations on existing relays. **Waiting on the subscriber**
6) Complete installations for all subscribers who can connect to existing relays. More work is required to complete all the installations. **Action: Subscribers, Phil, Joe**

A whole day was spent at Ardaneaskan, removing all the old fittings and replacing them with stainless steel fittings. The two NanoStation access points were replaced and realigned to serve the installation at Craig and other customers in Ardaneaskan.

A new AirGateway was left in Ardaneaskan to be used if a unit that had gone off-line had failed. In the event a power cut rebooted the suspect device and it came back on-line; we will pick up the spare AirGateway in due course. **Action: Phil**

There were a few interruptions to the service at Ardaneaskan on the 30th but investigations led us to believe that they were power related and after the power supply connections had been checked no further problems were observed. **Closed**

We have configured the new subscriber's equipment and it is now ready to be installed. **Completed**

The link from Craig to Ardaneaskan will be the longest in the network and is now under test. **Action: Phil, Joe**

The new relays on Creag Mhaol, when these are complete we can start work on the other relays. No progress this month. **Action: Phil, Mary, Joe, Georgie, Neil**

7.1.5 Customer Contracts

One contract is missing we will see if it has been misfiled. **Action: Phil, 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 software is being used to check the configuration of new equipment. In test mode it has been used to update the configuration of Ubiquiti equipment. It has become apparent that the configuration parameters can change in subtle ways with new versions of firmware and the sequence used to manually enter changes. The relevant changes will be applied to the software in due course. **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

Whilst our CBS grant was active we offered a few subscribers additional equipment to resolve problems for a notional fee of £10. For example this allowed subscribers to install a second Wi-Fi access points if signals were weak. Since our grant ended we can no longer offer this facility across the board. However we do have a few units which are no longer suitable for subscriber's primary routers as these have low range Wi-Fi. The units may well be suitable as a second access point to extend Wi-Fi coverage if a new small area is to be covered. It was decided we would offer these to subscribers on a first come first served basis at the original £10. Once these have been used then we can offer additional kit (either Ubiquiti or MikroTik) at cost price. Subscribers are free to find their own solutions from other manufacturers but CMNet will not support equipment that we have not provided.

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 Mast lease

Nothing from the Highland Council

8.1.2 Network Plan

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

8.2 Relays

8.2.1 Creag Mhaol

We have sent an update of the lease agreement to our solicitors. No response as yet. **Action: Phil**

8.2.2 Plockton

8.2.2.1 Hosting agreement

Nothing to report

8.2.2.2 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

Heavy usage on the 31st July has shown that the dishes that link to Plockton will need to be upgraded. We have the new dishes in stock and will install them when we can divert traffic away from the Plockton line. **Action: Phil**

8.3.2   Lochcarron

No issues.

8.3.3   Creag Mhaol

8.3.3.1   Existing relays

We will investigate hardware upgrades as the next step to reduce noise on the links. No progress this month. **Action: Phil**

8.3.3.2   New relays

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

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

The relay in Ardaneaskan has been upgraded and its access points have been re-aligned and are under test. **Action: Phil, Joe**

8.3.6   Portchullin (raised beach)

Activation of the Portchullin relay is waiting on the activation of the new Creag Mhaol relays. **Action: Phil**

8.3.7   Craig

We have configured and installed the equipment and we are now monitoring the link. **Action: Joe, Phil**

8.3.8   North Strome

Activation of the North Strome relay is waiting on the activation of the new Creag Mhaol relays. **Action: Phil**

8.3.9   Ardnarff

Once the new relays are in place above Strome Ferry we will check the line of sight from Ardnarff. **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 equipment from Holly Croft

Phil is to check Eric & Elizabeth are happy with our proposal to compensate them for the use of their electricity. Phil is to tidy up all the equipment left on their premises. No progress this month. **Action: Phil**

8.5.2   Removal of old cable

No progress this month.

8.5.3   Protection of cable on the hill

No progress this month.

8.5.4   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 have chased the Hall Committee **again** for written confirmation that we can install equipment in the hall. **Action: Phil, Mary**

8.7   Implementations

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

No change this month.

8.8   Company Logo

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

8.9   General Data Protection Regulation (Data Protection Act)

The new GDPR has made it necessary to update the relevant section in our customer contract. After some debate we agreed the following:-

Data Protection

The Service Provider will not share the Client's personal data with any third parties for any reasons without the prior consent of the Client. Such data will only be collected, processed and held in accordance with the Service Provider's rights and obligations arising under the provisions and principles of the General Data Protection Regulation which came into force in May 2018. The data protection policy is available on The Service Provider's website.

By signing this contract the Client confirms they have read the Service Provider's data protection policy and is giving consent for the Service Provider to hold the Client's personal data.

9 Director's training session

9.1 Configuring Ubiquiti and MikroTik equipment

We will organise another training session for all directors

9.2 AirControl

The new version has been installed without any issues. **Completed**

9.3 The Dude

The new version has been installed without any issues. **Completed**

10 Next meeting

Date of next meeting Wednesday 12th September 7:30pm at Fernaig House
The meeting closed at 8:25 pm