Broadband Steering Group

Minutes of the Meeting held on the 13th March 2019 @ 7:30 p.m. Fernaig House

1   Present and Apologies

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

2   Approve and adopt previous minutes

The previous minutes for February 2019, were proposed by Joe, seconded by Georgie.

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   Health Report on the Argocat

Work continues to bring the Argocat back from the dead. **Action: Phil**

3.2   Bandwidth

There are no capacity issues at the moment.

3.3   New Backhaul Installation in Achmore Hall

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

The draft hosting agreement produced by Joe was updated by Phil and circulated prior to the meeting. Joe has passed the document to the Hall Committee for their comment / agreement **Action: Phil, Joe**

3.3.2   Install our cabinet and internal equipment in the hall

Once the Hall Committee are happy with the hosting agreement we will suggest a site meeting to discuss the installation. **Action: Joe, Phil**

3.3.3   Install external equipment at the hall

3.3.4   Install new dish on CMAchmoreHigh for Plockton access

3.3.5   Switch connection from Plockton to CMAchmoreHigh

3.3.6   Install new dish on CMAchmoreLow for Achmore access

3.3.7   Get new line installed in the hall

3.3.8   Test the new line

3.3.9   Activate the new line

3.4   BT / Openreach upgrades

Much to our surprise BT have upgraded the equipment in the exchange to ADSL2/2+. In theory this will deliver download speeds "up to" 24 Mbps and upload speeds of 1.5 Mbps (if you are very close to the exchange). We were told by several sources that BT would not upgrade broadband equipment in their exchanges as their long term plan was to have all subscribers' interfaces in the new "fibre" cabinets so the BT exchanges could be sold. Apparently this has been reversed in the Highlands due to the high number of subscribers connected directly to exchanges.

Initial tests at Fernaig showed download speeds of 17 Mbps and upload of 1.25 Mbps with latency (ping) of 52 ms.; the same tests run today (14th) show download speeds of 8 Mbps and upload of 1 Mbps with latency of 53 ms. The difference is probably due to the BT router "tuning" the connection speed to increase stability over poor copper wires. The "tuning" generally happens over several days after a change.

The equivalent figures for CMNet run at the same time are download 29 Mbps upload 14 Mbps and latency 36 ms.

It will be interesting to see what rate BT charge when current broadband contracts are due for renewal now that we actually do have broadband speeds from BT.

If you are tempted by the landline offer please look at the pros and cons carefully. A lot of commercial ISPs offer discounts to new joiners and then hike prices considerably after the initial discount period. CMNet has an initial new joiner's charge to equalise the contribution of subscribers. For most people this is collected as a surcharge of £13 per month for the first 12 months. The surcharge was introduced as the initial tariff was much higher than today's. The tariff has been reduced every year that CMNet has been in operation.

Because CMNet operates on a cost recovery basis the more subscribers and the higher the total usage the cheaper the rates are for everyone.

When looking at the speeds through landlines make sure to check the upload speed as well as the download. Once you have useable broadband you may well find that sending large files (e.g. photographs) becomes the norm and then upload speeds which are generally well below download speeds become the major limit.

3.5 Subscribers

3.5.1 Existing relays

Live subscribers	- 44
Waiting for installations / activation	- 0
Waiting for subscriber's installation dates	- 1

3.5.2 Waiting for new backbone relays

Waiting for installations	- 30
Leavers since the last minutes	- 0
Total	**- 75**
New joiners since the last minutes	- 0

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.

3.6 New MikroTik replacements for AirRouters

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

3.7 Terms of Reference

Deferred

4 Secretary's report

We have given direct debit details to Scottish Power several times and are still waiting for them to take payment for the three months we owe them. We have given SSE meter readings.

Mary has paid Zurich for next year's insurance, submitted a claim to Georgie for a refund and received a cheque. **Completed**

4.1 Risk register

No progress this month.

4.2 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**

4.3 Terms of Reference

Deferred

5 Finance Director's Report

Monthly Statistics
Revenue for February:-

Brought forward				
Balance		**£1,960.69**		
Creditors			£445.87	
Debtors			£506.24	
Net				-£60.37
Bank balance				**£8,066.00**
This month				
Income	£572.25			
Expenditure	£151.98			
P&L		**£420.27**		
Creditors			£127.75	
Debtors			£30.00	
Net				£97.75
Adjusted P&L				**£518.02**
Carried forward				
Balance		**£2,380.96**		
Creditors			£573.62	
Debtors			£536.24	
Net				£37.38
Bank balance				**£8,584.02**

Liabilities

Estimated Liabilities	-	£0
Estimated balance after liabilities	-	£8,584.02

Provision for replacement of Electronic equipment

Total value purchased to date	-	£15,000.00
Balance after provision	-	£ -6,415.98

5.1 Year six tariff

The total number of gigabytes sold was 5,460. The break even tariff for 2 fibre lines is £0.38 per 20 GB, and for 3 fibre lines is £0.56 per 20 GB.

Phil calculated the equivalent rates for several GB increments. With a 50 GB increment the total number of gigabytes sold rises to 6,400 due to quotas being rounded up to the nearest multiple of 50. At 6,400 GB the break even quota for 2 fibre lines will be 62 GB per £1, and for 3 fibre lines 41 GB per £1.

The detailed results were circulated to all directors and it was agreed to amend the tariff from the 1st April to 50 GB per £1. All subscribers eligible for the new rates on the 1st April were informed by the end of February.

We will send out payment change details to those subscribers who were not eligible on the 1st April as they become eligible for the new rates. **Action: Phil**

5.2 Outstanding subscribers' debt

Excluding subscribers with quota increases one account is in arrears. **Action: Georgie.** In total for all subscribers the amount owed is £154.87. **Action: Georgie**

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

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

Four accounts are in debit, the relevant subscribers have been asked to correct their accounts. **Action: Georgie**

5.6 Year End Accounts and returns for Companies House and HMRC

Phil distributed the profit and loss account and the calculation worksheet for the financial year ending August 2018 at the meeting. This shows a surplus of ~ £2,000 for the year and therefore a likely tax bill of ~ £400. As the full documentation had not been completed prior to the meeting the directors were taken through the worksheet and the format was agreed. One anomaly was thrown up by the accounts; Joe and Georgie will double check the relevant payment. **Action: Joe, Georgie**

Phil will complete the accompanying documentation and circulate all the relevant documents in advance of the next meeting (directors were advised to bring along pencil, paper and calculators to the next meeting). **Action: Phil**

Phil also expects to be able to circulate the HMRC return so this can also be agreed at the next meeting. **Action: 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 performed reasonably well throughout February. On the 2nd of February there was a brief power cut in Achmore but most units rebooted and operated normally. Some units however suffered from false radar detection on rebooting and jumped frequencies. As a result of this Phil updated the firmware to release 6.1.9 issued to reduce the incidence of false radar detections and then reset the frequencies.

There have been no incidents of false RADAR detection since this new version of firmware was installed.

There have been a few unknown "local" IP addresses recorded this month, we have established which subscriber is involved and are investigating the reason. No progress this month. **Action: Phil**

7.1.2   Usage quotas

The monthly total for February was **2.95 TB, the equivalent of 3.27 TB for a 31 day month** (yet another new record), with a daily average of 105.6 GB; the peak usage was **_141.5 GB_** on Friday 15th.

One customer exceeded their quota and has been moved to the appropriate band.

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

One new installation was carried out since the last report.

7.1.4.1   Ardaneaskan

One subscriber has completed their pre-installation work and has been connected to CMNet. **Completed**

The spare AirGateway has been collected. **Completed**

One subscriber has been asked to confirm they have line of sight - whilst we were over working on the installation we had a brief look for a line of sight to the Portchullin relays. No line of sight is present at ground level however photographs taken from Portchullin (some time ago) show chimneys and gable ends of houses on the raised beach at Ardaneaskan. We will take more photographs when we next visit the Portchullin relays. **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 is temporarily suspended on the Creag Mhaol relays whilst the Argocat is repaired. **Action: Phil**

7.1.5   Customer Contracts

Contract amendments have been sent to customers to reflect the new changes to their quotas and charges under the new tariff. Joe asked that four subscribers' statements be checked and verified to resolve apparent anomalies. **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 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   Network Plan

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

8.2   Relays

8.2.1   Creag Mhaol

We have received a draft lease agreement from our solicitors; we have yet to go through this in detail. No progress this month. **Action: Phil**

8.2.2   Plockton

8.2.2.1   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

Hardware chip upgrades, frequency changes and signal strength increases have not made any significant improvement to the Braeintra link. Our next step will be to switch the access point to a different type of unit with a greater antenna gain. **Action: Phil, Joe, Mary**

8.3.3.2   New relays

Work is temporarily suspended on the Creag Mhaol relays whilst the Argocat is repaired. **Action: Phil**

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

8.3.7   Portchullin (raised beach)

The line of sight to the new Strome High relay has been confirmed. Activation of the Portchullin relay is waiting on the activation of the new Creag Mhaol relays. 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

The line of sight to the new 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 we 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 is suspended pending repairs to the Argocat. **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 10th April
The meeting closed at 8:45 pm