Broadband Steering Group

Minutes of the Meeting held on the 16th October 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 September, 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

The website is "full" and so for the moment no new documents can be uploaded. The last minutes available are for June 2019. Email cmnetcic@gmail.com if you have any questions.

3 Chairman's report

We continued work on the new relays this month and marked the 40th man day of effort spent on Creag Mhaol and the raised beach. However the weather has ensured that most of the trips to the top of Crag Mhaol were less than the full hours expected as it is rare that work isn't interrupted by rain or gales (or both). Many more days have been spent at sea level preparing and testing equipment so it can be transported and installed at the top of the hill.

This week we discovered that all the marker posts which we had installed to show the route of the cable runs had been removed.

Replacing 700 metres of marker posts will waste a considerable amount of time and delay other work.

3.1 Bandwidth

At the moment capacity is holding up well. Since the last minutes there have been a handful of times when we have crept over the 65 Mbps threshold. We will continue to monitor the situation. **Action: Phil**

On the 14th & 15th of October power was turned off at Plockton High School for planned maintenance which meant we lost our internet connection. We were not informed that the power would be turned off. Once we had traced the cause of the fault we redirected traffic through the Lochcarron backup line. Although the backup line has less than half the capacity of Plockton we were able to remain connected to the internet until power was restored at the school. We will contact the school to obtain new contact phone numbers as we received no response on the numbers we had been given and only discovered what was going on by driving over to Plockton. **Action: Phil**

3.2 Firmware / False RADAR

As there had been no incidents of false RADAR since the beginning of September it was decided to upgrade the remainder of the units to the latest firmware. Two days after this change there were three false RADAR events logged by the Braeintra access point. Even though the Braeintra access point and subscribers equipment had been updated to the latest firmware a week earlier without incident.

Quite why Braeintra is seeing incidents of false RADAR remains a mystery at the moment. We will continue to monitor the system. **Action: Phil**

3.3 New Backhaul Installation in Achmore Hall

3.3.1 Get quote for installation

Mary has spoken to Zen who says that they cannot get a quote from Openreach as the Hall address is not registered on the Post Office database. Mary agreed with Martin Irving (chairman of the hall committee) that she will register the hall's address and has completed the Post Office forms and is waiting for a response.

Zen informed us that the installation could be anything between two weeks and several months and we will not know how long it takes until a firm order is placed with Openreach via Zen.

As we are concentrating all our efforts of getting the new Creag Mhaol relays up and running we won't be ready to use the line in a couple of weeks however we cannot afford to put off our order until we are ready and then find we are faced with a delay of several months.

There was some discussion about the best way to proceed and it was decided we would place an order with Zen once we have confirmation of the post office registration and have installed our cabinet inside the hall so the Openreach socket can be installed. If it turns out the installation will be two weeks we will then decide whether to cancel the order (and lose some unrefundable payments) or continue with the order and leave the line dormant until we can complete the work to add the new Achmore line to CMNet. In that case we will be paying some rental charges for a line that we cannot use.

Mary will talk to Zen to clarify our options to cancel and order and then reorder in a few months time. **Action: Mary**

3.3.2   Install our cabinet and internal equipment in the hall
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   Subscribers

Live subscribers	- 45
Waiting for installations / activation	- 0
Waiting for subscriber's installation dates	- 0

3.4.1   Waiting for new backbone relays

Waiting for installations	- 31
Leavers since the last minutes	- 0
New joiners since the last minutes	- 1
Total	**- 77**

One installation has been completed 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.

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

There was some debate as to what we should charge subscribers who change their minds and decide to join having previously not taken up the option whilst the CBS grant was available. It was decided we should charge 89% of the cost of the equipment which is the equivalent of the contribution from CBS. This will be collected at £12 a month for the first year in addition to the New Joiners Premium making the total surcharge £20 per month for the first year.

3.5   New MikroTik replacements for AirRouters

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

3.6   Terms of Reference

Deferred

4   Secretary's report

4.1   Electricity supply accounts

Georgie has paid the three outstanding bills and they have been cashed. **Completed**

4.2   Risk register

No progress this month.

4.3   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**

4.4   Terms of Reference

Deferred

5 Finance Director's Report

Monthly Statistics
Revenue for September:-

Brought forward				
Balance		**£0.00**		
Creditors			£2,797.35	
Debtors			£6.00	
Net				£2,791.35
Bank balance				**£9,901.59**
This month				
Income	£412.99			
Expenditure	£339.79			
P&L		**£73.20**		
Creditors			£2.00	
Debtors			£105.00	
Net				-£103.00
Adjusted P&L				**-£29.80**
Carried forward				
Balance		**£73.20**		
Creditors			£2,799.35	
Debtors			£111.00	
Net				£2,688.35
Bank balance				**£9,871.79**

Liabilities

Estimated Liabilities	-	£2,688.35
Estimated balance after liabilities	-	£7,183.44

Phil has updated the monthly finance spreadsheet for the new financial year. **Completed**

However there is an error in the spreadsheet Phil gave Georgie and liabilities are not being calculated, Phil has therefore sent Georgie a new version to use next month. **Action: Phil**

We have received the outstanding invoice for £360 for trunking which was dated August and so has been included in last year's end of year accounts. The end of year accounts will be circulated next month after the AGM.

Provision for replacement of Electronic equipment

Total value purchased to date	-	£16,843.29
Balance after provision	-	£ -9,659.85

The next batch of cheques was signed and is ready to send out. A few subscribers have issues outstanding on their accounts and these will need to be resolved before we issue refunds. Action: Phil, Mary, Joe, Georgie & Neil

5.1 Next year's tariff

The total number of gigabytes sold was 7,600. The break even tariff for 2 fibre lines is 74 GB per £1, and for 3 fibre lines is 49 GB per £1.

5.2 Outstanding subscribers' debt

Excluding subscribers with quota increases there are two accounts in arrears.

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

One account is in credit, the relevant subscribers have been asked to correct their account. **Action: Georgie**

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

There have been no issues with the system this month, however the False Radar issue is still under investigation.

7.1.2 Usage quotas

The monthly total for September was 3.34 TB. The daily average was 111.44 GB; with a peak usage of 186.17 GB on Saturday 28th.

One customer exceeded their quota for the month and has had their quota increased.

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 installation has been completed since the last report.

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

There was one installation this month. **Completed**

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 continues on the Creag Mhaol relays. **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 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 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**

8.1.2 Network Plan

The network plan for the new relays on Creag Mhaol and the Portchullin raised beach has been completed and has been tested using examples of the various combinations of equipment. **Completed**

Final testing will be completed once the units have been installed in their final positions on the relays on Creag Mhaol - see 8.3

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*

8.3.3.1.1 Braeintra AP

We continue to monitor the performance of the Braeintra link. **Action: Phil, Joe**

8.3.3.2 *New relays*

The configuration of equipment for relay to relay links has been completed and tested.

The configuration of the remaining equipment for Creag Mhaol Strome side relays has been completed.

Using generator power the link from CMS_High to the raised beach has been tested and the signal strength will need to be improved

The units for CMS_High have been delivered to the relay but cannot be installed until the problems with the raised beach have been resolved.

The units on CMS_Low have been installed and are waiting to be cabled up and tested.

Two reels of trunking have been taken to CMAHigh ready to cover the cable to CMA_Intermediate.

8.3.3.2.1 Next steps

Upgrade the link between CMS_High and Portchullin raised beach

Using generator power test the units on CMS_Low

Using generator power test the units on CMS_High

Using generator power test the links between CMS_High, CMS_Low and the Portchullin raised beach

Take an additional reel of trunking to CMAHigh ready to cover the cable to CMA_Intermediate.

Encase the power cable from CMA_Intermediate to CMA_High in trunking

Take a reel of trunking to CMA_Intermediate ready to cover the cable to CMA_Low.

Encase the power cable from CMA_Intermediate to CMA_Low in trunking

Replace the CMA_High router enclosure

Test the mains power supply to the new relays

Replace the CMA_Low router enclosure

Test the new relay automated recovery algorithms

Install test equipment in Ardaneaskan East

Test the beam width of the Portchullin Access Point

Waste time replacing 700 metres of marker posts that have been removed

Action: Phil, Mary, Joe, Georgie, 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

Activation of the Ardaneaskan access point is waiting on the activation of the new Creag Mhaol relays. **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. **Action: Phil**

8.3.7 Portchullin (raised beach)

The line of sight to the new Strome High relay has been confirmed. The Portchullin and Ardaneaskan East access points and backbone link to Creag Mhaol have been installed at the Portchullin raised beach relay. Activation of the Portchullin relay is waiting on the activation of the new Creag Mhaol relays. **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 North 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 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 has restarted now the Argocat is back in action. **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 and **AGM** Wednesday 13th November
The meeting closed at 9:00 pm