Broadband Steering Group

Minutes of the Meeting held on the 12th June 2017 @ 7:30 p.m. Fernaig House

1 Present and Apologies

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

2 Approve and adopt previous minutes

The previous minutes for May, were approved 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 would like to be put on the circulation list or you have any questions.

3 Chairman's report

3.1 Bandwidth

Now it has been confirmed the line in Lochcarron can be upgraded to fibre we have increased speeds for the few unchanged subscribers to 30 Mbps download and 15 Mbps upload. All subscribers now have next generation broadband speeds as defined by the Scottish Government.

The latest version of the Ubiquiti firmware (6.0.4) was tested on AirRouters and it was still suffering from the spontaneous reboot problem. All AirRouters have now been rolled back to the last stable release of firmware (5.6.2). This means that we cannot now differentiate between a reboot caused by a firmware bug and a subscriber turning their kit off and on. **If you are experiencing problems with your AirRouter please let Joe or Phil know.**

Connection quality in Braeintra - we will test a hardware upgrade to the Access Points as the later versions cope better with noise.

3.2 Cyber Attack

Nothing to report, this topic will be dropped from further reports and resurrected if we come under attack again.

3.3 Admin Overhead

April's tariff changes - four subscribers' accounts have errors, three subscribers have had overpayments refunded.

3.4 WHAN

Nothing to report

3.5 CBS

Nothing to report

3.6 Subscribers

3.6.1 Existing relays

Live subscribers	- 35
Subscriber installation pending	- 1

3.6.2 Waiting for new backbone relays

Waiting for surveys	- 4
Waiting for installations	- 38

3.6.3 Others

On live access points but requested a delay	- 2
No response when asked for an installation date	- 2
Withdrawn from CMNet since the last minutes	- 0
New joiners since the last minutes	- 0
Total	- 81

No change this month.

3.7 Terms of Reference

Deferred

4 Secretary's report

4.1 Risk register

We will evaluate the costs and benefits of a third connection through the Strome Ferry exchange. **Action: Mary**

4.2 Long term support plan

Mary will think about the skills required and how to develop a wider support network. **Action: Mary**

We will look at the possibility of developing software to configure equipment. **Action: Phil**

4.3 Zen Refund

Zen has now confirmed we are due a refund of the VAT and we have received a credit note for £626.97; we will audit the Zen account to confirm that the correct sums have been received. **Action: Mary, Phil, Kate**

4.4 Terms of Reference

Deferred

5 Finance Director's Report

5.1 Monthly Statistics

Capital expenditure claimed against our grant of £37,538:-

Brought forward	- £24,985.75
This period	- £ 0.00
Carried forward	- £24,985.75
No Change	

Revenue:-

Brought forward	-	£7,906.71
Income this month	-	£450.00
Expenditure this month	-	£206.72
Carried forward	-	£8,149.99

Liabilities

Estimated Liabilities	-	£3,150.00 (includes ~ £2,800 to "repay" CBS)
Estimated balance after liabilities	-	£4,999.99

Provision for replacement of Electronic equipment

Total value purchased to date	-	£9,000.00
Balance after provision	-	£-4,000.01

The refund from Zen has not yet been credited to our bank account and therefore liabilities have not been updated.

We have now made the last line rental payment to Daisy. **Completed**

5.2 Next year's tariff

Total gigabytes sold 1,460; break even tariff for 2 fibre lines - £0.70 per 10 GB, for 3 fibre lines - £1.05 per 10 GB.

5.3 Outstanding subscribers' debt

No accounts are in debit.

5.4 Next three month's budget and cash flow

No issues.

5.5 Housekeeping

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

5.6 Payments for installations of subscriber's equipment

All payments are up to date.

5.7 Standing orders

Four accounts have an error, all are in credit; we have emailed all those concerned asking them to change their standing orders in July. **Action: Joe, Phil**

5.8 Loan Contracts

It was agreed we will review all loans and repayments to ensure all the documentation is complete. **Action: Phil, Kate**

5.9 Additional access to the bank account

RBS have set up Kate's access to the bank account incorrectly; Kate has spoken to them on the phone and has been assured that the error will be corrected by the middle of June. **Action: Kate**

5.10 Accounts for y/e August 2016

Mary paid the tax due and we have checked our payment has been lodged with HMRC. **Completed until next year**

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
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

AirRouter reboot problem - we have rolled back all AirRouters to the last stable firmware version. Since this change was made the number of reboots has dropped dramatically. We have followed up two instances; one is a possible hardware fault and the unit has been replaced, the other was a problem with a subscribers PC. There have been no reports of spurious reboots for over a week.

If anyone is experiencing problems with any kit please let us know ASAP.

One customer reported a problem this month with Wi-Fi connections dropping, after reconfiguring their AirGateway and asking them to run a series of tests we have concluded that this is a "Wi-Fi dead spot problem". After some debate it was agreed we would offer to install a second access point for the customer for a nominal £10 fee. **Action: Phil** (but also see 8.7.1.1)

One customer reported that he could not log on to his AirRouter. After investigation all of his equipment and the dish on the relay was rebooted. This solved the problem. We believe this was related to the power cut.

One customer reported frequent connection drop outs. Rebooting of all relevant units solved the problem. It is not fully understood why the dropouts occurred but it is likely this was also related to the power cut.

One customer reported problems with their AirRouter, after investigation the router and the power supply were changed

Two customers in Braeintra are experiencing poor signal levels we will try a hardware upgrade to the Braeintra access point. **Action: Phil, Joe**

7.1.2 Usage quotas
The monthly total for May was 906 GB with a daily average of 29 GB, the same as the previous month.

The peak usage in May was 44.2 GB for Friday 12th May, a slight drop from the peak for April.

Two customers exceeded their quota in May; both have elected to increase their quota.

7.1.3 Possible virus infection
The monitoring system will be amended to increase the reporting threshold. No progress this month. **Action: Phil**

7.1.4 Installation of equipment
No installations since the last minutes.

7.1.5 Customer Contracts
Joe presented a revised amendment to contract form and after some debate it was agreed subject to some minor changes. We also agreed that as this is an amendment to an existing ongoing contract there will be no need for signed copies to be returned for CMNet's files. The document will be sent by email to subscribers for their records and a copy printed and held by Joe for CMNet's records. **Action: Phil, Joe**

7.2 Changes for next month
7.2.1 Increases in quotas for existing subscribers
There have been no requests for quota increases this month apart from retrospective increases for customers exceeding their quotas.

7.2.2 Additional Management tools / reports
Software to check the configuration of different types of equipment - no progress this month due to other priorities
Action: Phil

7.2.3 Potential personal safety issue
Changes are ongoing. **Action: Phil, Joe**

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

Work continues on the new network plan to incorporate new relays on Creag Mhaol above Strome Ferry. **Action: Phil**

8.2 Relays

8.2.1 Creag Mhaol

The relay at Craig has been dismantled in preparation for its use on Creag Mhaol. Additional scaffold couplers have been purchased. **Action: Phil**

8.2.2 Plockton

8.2.2.1 Hosting agreement

We will add details of the solicitor's quote to the accounts. No progress this month. **Action: Phil, Kate**

8.2.2.2 Equipment and tidy up

New dishes have been ordered to improve the signal strength of the link to Creag Mhaol; the old dishes will be used for shorter links to connect the new relays. **Action: Phil**

8.3 Backbone development

8.3.1 Plockton

No issues.

8.3.2 Lochcarron

Phil circulated a revised contract for Andrew and after some debate it was agreed subject to some minor changes. It was agreed we should suggest to Andrew that the contract should start from the date we first began work on the installation. It was also agreed we should again offer to pay Andrew for the work he did to allow the BT cable to be installed. Phil is to update the contract and send a copy to Andrew for his approval. **Action: Phil**

8.3.3 Creag Mhaol

8.3.3.1 Existing relays

Additional shielding is no longer available from our usual supplier; we will investigate hardware upgrades as the next step to reduce noise on the links. **Action: Phil**

8.3.3.2 New relays

Planning the electronic kit for the new relays is complete. **Action: Phil**

8.3.4 The Glen

One access point will be upgraded to see if that will reduce the noise levels. **Action: Phil**

8.3.5 Ardaneaskan

Phil circulated a revised contract for Beccy and after some debate it was agreed subject to some minor changes. Phil is to update the contract and send a copy to Beccy for her approval. **Action: Phil**

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

The relay at Craig has been removed so it can be installed on Creag Mhaol. A signal strength test was performed which suggests the link to Ardaneaskan is viable with NanoBeam 19s. We will look for a test site to allow real world tests to be performed. **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

No progress this month.

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 Community backhaul, West Coast Backbone (WCB)

Nothing from WHAN / WCB

8.6.2 ADSL Broadband installation at Plockton High School

All subscribers continue to be routed through Plockton - there are no signs of any performance problems with the fibre line.

8.6.3 ADSL Broadband installation at Lochcarron

Mary has ordered an upgrade to fibre which is scheduled to be installed on the 13th June but so far we have not received the new router; the upgrade will make the old router redundant and the line unusable. Fortunately we do not need the Lochcarron line at the moment and so we can install the new router after the upgrade. **Action Phil**

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 Equipment

Orders have been placed for the electronic kit for the new relays. The main batch has been delivered; the second batch is still outstanding. **Action: Phil**

Subscribers' installations - we have enough subscribers' equipment in stock for a dozen installations. But a review of the suppliers' websites shows that our current preferred equipment may not be available when we come to reorder. The AirRouters we used are no longer manufactured and AirGateways appear to be being phased out by some suppliers.

It is therefore necessary to review the equipment used for subscribers' internal installations. Phil presented various options to replace the current units and after some debate we came to the following conclusions:-

- Wi-Fi is likely to become more important that Ethernet.
- 5 GHz will become as important as 2.4 GHz.
- Higher Wi-Fi speeds are likely to be required.
- We should look for units with a range as good as or better that the AirRouter / AirGateways.
- Most households are likely to need a simple installation with one access point.
- Mesh implementations - i.e. whole house installations may be a requirement for some households
- If possible we should stay with manufacturers we already use to reduce the effort required for configurations
- Price is a very important factor

It was therefore decided we would buy and test two MikroTik routers both dual band models. **Action: Phil, Joe.**

8.8 Company Logo

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

9 Director's training session

9.1 Configuring Ubiquiti and MikroTik equipment

We will organise another training session. **Action: Phil, Joe.**

Joe and Phil went through the management reporting system documentation. Phil will update and extend the document. No Progress this month. **Action Phil**

Joe and Phil went through the configuration of the Lochcarron router, more training will be organised in due course. **Action: Phil, Joe**

9.2 AirControl

All AirGateways have had their firmware updated and are now accessible directly from AirControl. **Completed**

9.3 The Dude

The new hardware platform has been ordered and received and is being configured. **Action: Phil**

10 AOB
None

11 Items to add to the agenda of the next meeting
None

12 Next meeting
Date of next meeting Monday, 10th July 7:30pm at Fernaig House.
The meeting closed at 9:10 pm.