

Chairman's AGM Report 2021

CMNet is now eight years old and in December it will be seven years since the first subscribers joined. CMNet remains the only provider that can deliver Next Generation Broadband speeds to all the premises in the area at a reasonable cost.

CMNet operates on a cost recovery basis with minimum overheads thanks to everyone volunteering to offer their services for free. As the number of subscribers and the volume of data grow our unit costs drop which means everyone benefits from cheaper broadband.

At the moment we hold the line in Lochcarron in reserve should there be a problem with either of the two main lines in Achmore and Plockton. However the growth in volumes has been such that it is now time to look for additional capacity. To make sure we have the resilience and backups we are actively looking for a site in Lochcarron as close as possible to the exchange.

The average usage of the active accounts is a little over 130 GB per subscriber per month. This year has seen an 8% increase in volumes over the previous year.

Total average monthly usage by year:-

2021 - 5,900 GB
2020 - 4,158 GB
2019 - 3,600 GB
2018 - 2,400 GB
2017 - 1,100 GB
2016 - 500 GB

As we were on target to make a healthy surplus this year it was decided to invest in some of the new generation of Ubiquiti equipment. Although it's early days for testing the new equipment it has shown a marked increase in capacity over the "old" units.

Growth in volumes in the past year has allowed us to reduce the tariff from £1 per 50 GB to £1 per 75 GB.

In September 2020 we were ready to start the next round of installations however before we could make a start the COVID lockdown restrictions intervened. The government restrictions remained in place until the middle of May and in June we started work on configuring new equipment and new subscribers started to come online in July.

By the end of August 2021 subscriber numbers had increased to 53.

There are 18 subscribers waiting for a connection.

Other topics:-

Long term support plan

Our software to automatically backup and restore configurations is now being used to configure equipment for new subscribers. It has been enhanced to report on frequency changes to help tune the system to reduce the impact of false RADAR events.

It remains our goal to increase the number of people that can support the system. Our new software will give volunteers a simple mechanism to replace any equipment that fails should a CMNet director

not be available. The new relays on Creag Mhaol have been designed to be fault tolerant and to automatically switch to a backup unit should the primary unit fail. Our intention is to extend this to the “old” Achmore relays in due course.

Electricity supply

As in the previous year we have seen a considerable increase in electricity costs this year mostly due to increases in the standing charge. The increase in the number of subscribers has allowed us to keep the “standing charge” element of the tariff at £5.

Directors:-

There have been no changes in directors this year.

Here is a breakdown by area:-

Whole House Wi-Fi - In response to subscribers’ requests we have developed packages to make sure CMNet’s Wi-Fi signal is available throughout properties.

False RADAR (FR) - There continue to be incidents of false RADAR detection on various access points interrupting the service for a couple of minutes. We have developed software that will provide data to allow better use of frequencies by reporting when frequencies have been changed. This has allowed us to reduce the frequency of events.

Internet Gateways

Achmore - The line in Achmore Hall’s performance has been somewhat erratic but has settled down in recent months and generally delivers 72 Mbps download and 19 Mbps upload.

Plockton - The dish on the school has been moved and performance has now been restored again to ~ 73 Mbps download and 20 Mbps upload.

Lochcarron - The performance of the line has deteriorated but it is being kept as a backup should Plockton or Achmore be unusable. In due course this line will be upgraded.

Backbone relays

Creag Mhaol - All the Strome Side relays are complete and have been tested. Automatic recovery of failed units has been suspended whilst work is being progressed on false RADAR events. The Achmore side relays will be upgraded to install backup devices in due course.

Subscriber Connections

Portchullin - Before we start installations we need to upgrade the metal enclosures to plastic as they are suffering from the salt air.

Strome Ferry - Trials have shown that the signal is being affected by the rise and fall of the tides. New equipment has been purchased and is being tested with a view to alleviating the problem.

Subscriber’s Bandwidth - Bandwidth limits remain unchanged at 29 Mbps download and 14 Mbps upload. As we all share the available bandwidth speeds will be reduced as the load increases. We are

investigating why we do not always show full utilisation of the capacity available at the fibre lines and have started to extend our monitoring to individual network components to identify bottlenecks.

Equipment - The hardware continues to perform well with no hardware failures.

CMNet Software - Our software is performing well.

There are many people to thank for their efforts in the past year:-

I would like to thank Fay Mackenzie who has so kindly given us permission to use Creag Mhaol and The Glen for our relays.

Thanks to Dave Whittingham and Beccy Smith who are hosting equipment in Ardaneaskan and to Ken Hopper for his help with installations in Ardaneaskan.

Thanks to Andrew and Emma MacKenzie who are hosting equipment which allows us to connect to the BT exchange in Lochcarron.

Thanks to David Geddes who is hosting a relay in North Strome which will allow Strome Ferry to be connected.

I would also like to thank all our potential subscribers for being so patient.

Finally I would like to thank my fellow directors who have all freely given their time and expertise.

Please accept my apologies if I have missed anyone off this list.

Phil