

ARGYLL AND BUTE – DIGITAL UPDATE

1.0 EXECUTIVE SUMMARY

- 1.1 The purpose of this report is to provide a full update on all aspects of digital infrastructure Build across Argyll and Bute Fixed and Mobile.
- 1.2 Subject matters will include the overall percentages of premises with Next Generation Access (NGA), the current state of R100 build across our area, the current voucher projects (UK Government and Scottish Government), the Kerrera Fixed Wireless Access (FWA) project, the latest position with Analogue to Digital Transition, mobile improvements across Argyll and Bute and the latest position regarding the mobile signal mapping project.
- 1.3 In particular, a significant part of the report will relate to the upcoming retirement of the Public Switched Telephone Network (PSTN), this is the analogue to Digital Transition which has the potential to have significant implications for predominately rural communities across Argyll and Bute.

RECOMMENDATION

That the Environment, Development and Infrastructure Committee consider the content of this report.

ARGYLL AND BUTE – DIGITAL UPDATE

2.0 INTRODUCTION

- 2.1 The purpose of this report is to provide members with a full update on all aspects of Digital Infrastructure Build across Argyll and Bute Fixed and Mobile.
- 2.2 The first part of this report relates to Broadband coverage across Argyll and Bute and whether it is considered to be Superfast or Ultrafast, Fixed Wireless Access (FWA) or Satellite. In addition, the first part of the report also deals with the transition of the Public Switched Telephone Network (PSTN) from analogue to digital and the implications for our communities. The second part of the report deals with an update on mobile phone infrastructure, mainly the Shared Rural Network (SRN), an update on the community hubs project, and an update on the Council's Mobile Phone Mapping project.

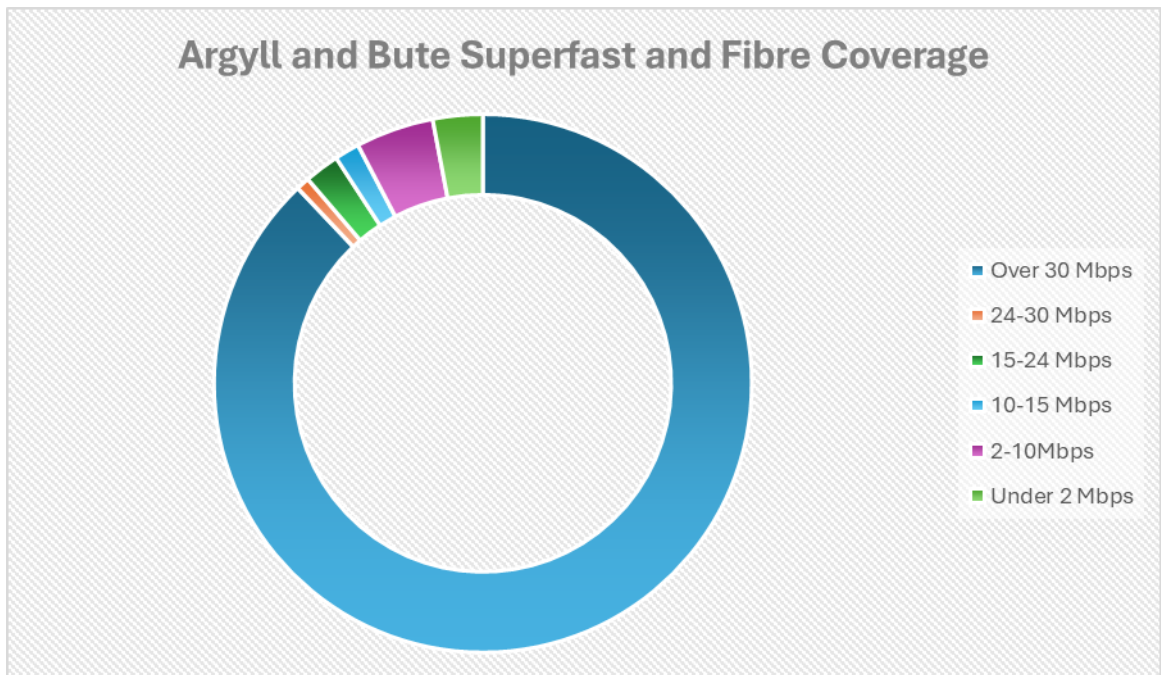
3.0 RECOMMENDATIONS

- 3.1 That the Environment, Development and Infrastructure Committee consider the content of this report.

4.0 DETAIL

4.1 This diagram (DIA 1) shows the current percentages of connections across Argyll and Bute as of the 1st August 2024. Fibre to the Premise has increased to 17.72%, (8.26% of this is Virgin Media which is only active in the Helensburgh area). This increase is included in the 88% Superfast Figure as Ultrafast Broadband is over 30Mbps

DIA 1



Superfast	>=30 Mbps	87.95%
	24 - 30 Mbps	0.8%
	15 - 24Mbps	2.1%
	10 - 15 Mbps	1.5%
	2 -10 Mbps	4.7%
	< 2 Mbps	3%

Ultrafast (inc in Superfast %)	> 100 Mbps	18.17%
Openreach FTTP		11.73%
Virgin Cable		8.33%

Fibre partial/full at any speed		95.29%*
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Actual Percentages Taken from Think Broadband

* This is the percentage of premises that have access to a Digital line regardless of if they can get Superfast Broadband

- 4.2 As you will all be aware the Scottish Government is currently undertaking a major digital infrastructure programme. This programme is Reaching 100% (commonly referred to R100) with contracts awarded to Openreach. Build in Argyll and Bute has been slow due to geographical and logistical challenges. That said, significant improvements have been made in recent months and this progress is accelerating however we are still behind on the contracted build.
- 4.3 Improved dialogue and planning measures have been implemented between our Roads and Economic Growth Services and Openreach. This has led to fewer complaints regarding standards of work, better awareness of what is being planned and greater coordination of effort. Work is however continuing to improve actual delivery on the ground.
- 4.4 There is still a risk that premises are de-scoped out of the contract as the hard stop date for contracted build is March 2028. Argyll and Bute has programmed build right to the end of the contract so any slippage could be an issue for our communities.
- 4.5 Currently 1,100 premises have been reached with Openreach anticipating that a further 1,600 premises will be reached by the end of this financial year. These figures could be higher as a result of overspill. Overspill is a term used to refer to premises that gain access to fibre that are out with the contracted build. Currently overspill is around 20%.
- 4.6 Nearly half of the planned build will be on Mull in areas such as Fionnphort, Aros, Dervaig, Tobermory and Pennyghael. Openreach are also planning to do further builds in Barbreck, Lochavich, Balvicar, Luing and Craignure.
- 4.7 For context last year 23/24 Openreach provide full fibre connections to only 550 homes and businesses which was a mix of contracted build and overspill.
- 4.8 Another significant part of R100 is the Scottish Broadband Voucher Scheme (SBVS), The Voucher scheme is a £5,000 voucher per eligible premise and can be applied if they are out of scope of the initial contract and have a broadband speed of less than 30Mbps. These vouchers are supplier led and can be aggregated allowing a sustainable model to be established in a given community.
- 4.9 Looking ahead survey plans being drawn up in relation to works scheduled for 2025/26. This enables supply chains and contractors to plan ahead and ensure the acceleration of build continues.
- 4.10 Currently there are 2 SBVS voucher schemes ongoing; one on Jura nearing completion and one in Rhu which has just started. Some background information is available in **Appendix 1** of this report.
- 4.11 As a result of the voucher scheme in April 2024 Lussa Gin Distillery on Jura saw a 206% increase in tour bookings as a result of having access to the new Ultrafast

network, they were getting by using a 4G broadband connection which would frequently drop out.

- 4.12 Lismore is another one of our islands that now has Ultrafast Broadband as a result of the R100 programme. This island was one of 3 islands in Argyll and Bute to benefit from the R100 subsea investment. The other 2 islands were Iona and Colonsay. The Craignure to Iona build is currently underway with additional work happening now in Tobermory. Colonsay is still in the initial design stages with discussions ongoing with our Roads and Infrastructure Department.
- 4.13 Project Gigabit is a £5Billion UKG programme administered by the Department of Science Innovation and Technology (DSIT). Building Digital UK (BDUK) have just announced that Openreach have just signed an £800M contract to provide an addition 312000 premises across the UK the first two call offs (parts of England and Wales) have been announced with more to follow in the coming months which will include Scotland.
- 4.14 Part of Project Gigabit similarly provides access to Gigabit vouchers. The eligibility of these vouchers is slightly different in that a premise needs to have broadband speed of less than 100Mbps which means that even if you have access to SFB (speeds greater than 30Mbps) you are still eligible.
- 4.15 Currently, we have one gigabit voucher scheme running in Roseneath which is looking to establish a Full Fibre network to 76 premises around the Princess Louise Hall. The use of UKG Gigabit vouchers was required as some of the premises in the project area were not eligible for SBVS vouchers due to existing speeds.
- 4.16 We are currently in discussions with the SBVS Team and an interested provider looking at utilising vouchers to connect the island of Gigha. This is aiming to provide a wireless backhaul link from Islay (where the provider currently has a Point of Presence (POP)) to Gigha then install a fibre network across the island.
- 4.17 We are also looking to see if this could ultimately be extended to the mainland as there are a number of voucher eligible premises in Tavantaggart, Rhunahaorine, Ballachroy, Clachan, Portachoillan, Gartnagrenach, Kilchamaig, Ardpatrik, Kilberry, Coulaghaitro and Cretshengan. In total this has the potential to connect an additional 400+ premises.
- 4.18 Using a combination of UKG and SG vouchers Openreach are currently working to conclude circa 200 premises within the Rhu, Clynder and Jura exchanges within the next 6-9 months.
- 4.19 A further project that is long overdue is the Kerrera FWA project this is looking to provide a wireless network across the whole of the island. This has been hampered with numerous protracted wayleave negotiations. It is hoped that Back of Beyond Broadband a local digital provider will get full signoff shortly to allow them to install all the hardware which is ready to be airlifted to site for installation.

4.20 Mobile Signal Update

- 4.21 On the mobile side of connectivity several major programmes are underway, or recently completed. The original major mobile investment was the Emergency Service Network (ESN) or by its full title The Emergency Service Mobile Communication Platform (ESMCP), this was supported by the Home Office's part, the Extended Area Sites (EAS).
- 4.22 The next major investment was by the SG with The Scottish 4G Infill Programme (S4GI). This was a £27.5M investment targeting mobile signal Not-Spots. This is now completed with over 50 masts built across rural Scotland, Highland and Argyll and Bute LA's received the majority of this investment, with Argyll and Bute getting 7 new sites as well as major fibre spine investment.
- 4.23 The current Shared Rural Network (SRN) is the biggest and most complex of all mobile infrastructure investments, £500M from the UKG and the just over £500M from the 4 mobile operators Everything Everywhere (EE), Three, Virgin Media O2 (VMO2) and Vodafone.
- 4.24 The SRN is broken into several parts Total Not-Spots (TNS), funded by UKG and being led by Digital Mobile Spectrum Limited (DMSL) and Partial Not-Spots (PNS) funded by the operators with each operator doing different areas.
- 4.25 There are new sites, upgraded sites, site sharing, to date across Argyll and Bute most of the SRN PNS sites have been by VMO2 managed by Cornerstone with consultants WHP, several sites were de-scoped from the initial plan and not taken forward, stating that they were not required to meet their obligation of geographic coverage set down by Ofcom.
- 4.26 The Ofcom licence obligations commit each individual Mobile Network Operator (MNO), to increase its 4G coverage to 88% of UK landmass by June 2024 – and to 90% by January 2027 – with these individual obligations supporting the overall target of 95% by December 2025. Relief from these obligations may be allowed if costs are excessive.
- 4.27 EE were always at an advantage as they were awarded the initial ESN and had already invested significant sums to enhance their geographic coverage.
- 4.28 The SRN was always going to be extremely challenging due to the very nature of the remote rural locations they were trying to secure coverage. Securing planning consents was the first barrier as most of these sites were in highly designated areas, which required a significant amount of consultation with numerous statutory consultees. The second barrier was securing private wayleaves with numerous landowners, the third barrier was the actual logistics of building these sites and getting power and transmission. Several sites have used helicopters to build the masts rather than build major access tracks. Helicopter builds are more sensitive to the surrounding flora and fauna and ultimately has less visual impact on the landscape. They have also been used where it has not been possible to get materials and machinery to site due to the fragile nature of some road infrastructure and ferry restrictions.

4.29 TNS sites are going to be even more challenging as these are going even further in remote rural areas where there is no mobile signal at all. Several planning applications have already been submitted which have resulted in significant local objections.

4.30 Analogue to Digital Transition [LINK](#)

4.31 Significant discussions are currently ongoing as a result of the Analogue to Digital transition with the 2027 analogue switch off deadline rapidly approaching, BT held a number of Drop-in sessions in Tobermory, Lochgilphead and Dunoon in August inviting residents to come and speak to them about their concerns of the PSTN switch off and their transition to Digital Voice.

4.32 Initially this was to be completed by the end of 2025 however in June this was extended to 2027 and has caused significant concern among numerous groups. It is wrongly perceived that this is Openreach turning off copper which people that don't currently have full fibre provision rely on for broadband and telephone connections. The copper network is not getting switched off it is the old analogue switching gear in telephone exchanges that is getting made redundant.

4.33 A customer that does not receive a broadband speed above 2Mbps will not be moved.

4.34 One of the major concerns is in the event of a power cut. Currently in the event of a power cut homes that still have an old analogue phone line can plug it straight into the phone socket in the wall and still make/receive calls as power comes from the exchange. Once the transition is implemented this option will no longer be available but alternative solutions are available and more will be available when the time comes of switch over.

4.35 Currently there are 2 solutions available

- Battery Back-up Units (BBU's): most suitable for customers that do not have mobile signal. These will be offered to vulnerable customers for free.
- Hybrid Phones with built in batteries, which switch to mobile network connections when necessary: most suitable for customers with mobile signal. These will be offered to vulnerable customers for free.

4.36 To allay people fears it will be no more complex than plugging your existing handset from the wall socket into the back of your broadband router. 99% of phone handsets are compatible with a digital phone service.

4.37 Points to note

Nothing Changes for you if:-

- You already have Digital Voice (BT) or Internet calls from another provider
- You are a mobile only household.

If your landline is migrating

- Check if other devices are connected to your landline (e.g. telecare, burglar alarms, etc.).
- Ask the device manufacturers if those connected devices are digital-ready.
- Inform your phone company about your devices.
- Let your phone company know if you are a vulnerable customer

4.38 If you already have broadband, the switchover could be as simple as unplugging your phone line from the wall-mounted socket and plugging it into the back of your broadband router. If you don't have access to broadband Phone companies are working on solutions to **keep all customers connected** and will be in touch with customers prior to any transition being agreed.

4.39 Vulnerable customers, like telecare users, should inform their phone company about their needs and check if their equipment is "digital-ready." Telecommunication Providers are working with local authorities and telecare providers to assist vulnerable customers. Encourage those relying on landlines to contact their phone company and social care provider

There have been 4 groups categorised as vulnerable these are

- Visual Impairment
- Hearing Impairment
- Registered Disabled
- Telecare user

It is crucial that your telephone provider are aware that an individual sits with-in one of these groups so that measures can be put in place as to not migrate their line at the moment and that they are aware that they are eligible for free power outage resilience.

4.40 Most Internet Service Providers (ISPs) have signed up to the charter of commitments for customers with Telecare, below

The charter of commitments for customers with Telecare

Communications Providers must:

1. Not undertake any non-voluntary migrations, until they have **full confidence they are taking all possible steps to protect vulnerable people** through the migration process.
2. Not migrate Telecare users without CP's, the customer, or the telecare company **confirming they have a compatible and functioning telecare solution** in place.
3. Work to provide battery backup solutions **that go beyond the Ofcom minimum of 1 hour of continued access** to emergency services in the event of a power outage.
4. Collectively work with Ofcom and Government to create a **shared definition of 'vulnerable' customer groups** that require greater support, specific to the digital landline migration.
5. Conduct checks on customers who've already been migrated to **ensure they don't have telecare devices we were unaware of**, and if they do, ensure suitable support is provided.

4.41 Mobile Mapping Project

4.42 This project was approved at the February Policy Resources Committee. There have been lengthy ongoing discussions between the Councils and Scottish Futures Trust (SFT) legal teams to ensure everything meets all joint requirements.

4.43 All the legal complications with this being a Tripartite agreement between SFT, Argyll and Bute and the successful bidder are now concluded with the publishing on Public Contract Scotland on the 16 August with and contract award date of 24th October and contract commencement 7th November.

4.44 Islands Infrastructure Fund Digital Hubs

4.45 Strategic Transportation were successful in securing £100k from the SG Islands Infrastructure Fund to engage, supply and support 4 Communities establish Digital Hubs on their islands. The Islands were Coll (An Cridhe), Tiree (Development Trust Building), Iona (Community Hall) and Islay Kilarrow Hall). All 4 locations have been provided an additional 3-year extended warranty and a direct line to the supplier for technical advice.

4.46 Some of the Audio-Visual Equipment included across the 4 hubs included (Photos in **Appendix 2**)

- HP Large Room Poly video conferencing systems
- HP Small Room Poly video conferencing systems
- Promethean Touch Screens fully mounted on mobile trolley
- Laser projectors

- Large Portable folding projector screen
- State of the art mobile audio system
- Laptops
- iPads
- Various configuration and sizes of screens
- All wiring, mounting, fitting, testing and training

4.47 The project has now been successfully concluded and has been a huge success with the communities managing to deliver new communication lines and ventures that they would of be unable to previously. Initial feedback from the supported communities is available in **Appendix 2** of this report. Additional support will be required in the future to fully utilise the many possible features that this investment brings to these island communities.

5.0 CONCLUSION

5.1 This report updates Members on all aspects of Digital Infrastructure improvements which are paramount to the future development of Argyll and Bute, securing and retaining high-quality jobs and encouraging entrepreneurial skills

5.2 It also highlights some of the issues being experienced across Argyll and Bute concerning digital connectivity and measures that are being taken across numerous council departments/services to support infrastructure providers and their consultants.

5.3 The Strategic Transport team will continue to support and develop ongoing relationships with Government Officials, contractors, communities and other external partners to ensure the digital future of Argyll and Bute is at the forefront of discussions.

6.0 IMPLICATIONS

6.1 Policy- the Single Outcome Agreement (SOA) and Economic Development Strategy and Action Plan support improvements in the digital infrastructure.

6.2 Financial – None arising from this report.

6.3 Legal – None.

6.4 HR - Better Digital connectivity will benefit our staff in terms of accessibility and safety when they are delivering services to remote communities.

6.5 Fairer Scotland Duty:

6.5.1 Equalities - the differing nature of the deployment of new technology has the potential to lead to inequalities in terms of access to digital services including those which support business and personal development.

- 6.5.2 Socio-economic Duty - there is an overall risk that the economic and social benefits rising from modern digital infrastructure are not fully realised.
- 6.5.3 Islands - There are risks that those areas which do not benefit from digital infrastructure could become less attractive locations within which to live and work which could have implications in relation to the SOA objective of growing the population.
- 6.6 Climate Change - The ability to access online services/meetings will limit the requirements to travel reducing an individual's carbon footprint.
- 6.7 Risk - The various programmes are reliant on new technology and innovation which is developing rapidly. Some projects are reliant on commercial operator decisions to invest whilst grant funding is necessary for many aspects of digital infrastructure improvement in Argyll. These aspects all create a level of uncertainty around the extent of infrastructure improvements.
- 6.8 Customer Service - Improvements in broadband and mobile technology improve the opportunities for digital based customer services.
- 6.9 The Rights of the Child (UNCRC) – None.

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7th August 2024

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APPENDICES

Appendix 1 – Jura project

Appendix 2 - Feedback from Digital Hub Communities

APPENDIX 1 – JURA PROJECT

The Jura project has been slightly different, as a result of some major discussions between the community of Jura, Openreach (OR) and the Scottish Government. Initially OR were contacted by Jura Community Council through Openreach's Fibre Community Partnership (FCP). OR were looking to connect some premises through this route, this coincided with plans by the Scottish Government's 4G Infill (S4GI) team to install 2 masts on Jura. OR spoke to SG on mutual benefit if they could link plans.

Initially the 2 S4GI masts being built on Jura 1 at Craighouse and 1 at Ardlussa were planned to have the backhaul (connection to the internet) provided by a microwave link. Jura was not in scope of the R100 contract. Openreach suggested that if the 2 masts were fibre fed, they could then use this fibre to fibre up the island using vouchers, Commercial Investment and community buy in. As a result of programme integration Gigabit Jura was established.

This has not come without its own challenges with numerous iterations of project design as a result of major community involvement including some very protracted wayleave negotiations and major involvement with our roads department.

Other major challenges were worker accommodation, the Covid19 pandemic, the resulting microchip shortage and of course west coast weather.

However, the good news is that this project is almost completed. There are circa 80 premises still to be commissioned in the next 2 months and some civil remediation to be completed but overall the delivery of this project represents a huge result for one of our remotest islands and its digital future.

APPENDIX 2 - FEEDBACK FROM DIGITAL HUB COMMUNITIES

Tiree

Generally speaking it has gone really well, we are still using the equipment on a pretty regular basis for meetings, both internal and external bookings (e.g. the Community Council). We will be using it next month to do our AGM in hybrid format. We've had training sessions run in there for local businesses and groups using the equipment, and another local charity used it to carry out job interviews a while back. So definitely benefitting our community. (P Meyer, Tiree Development Trust)





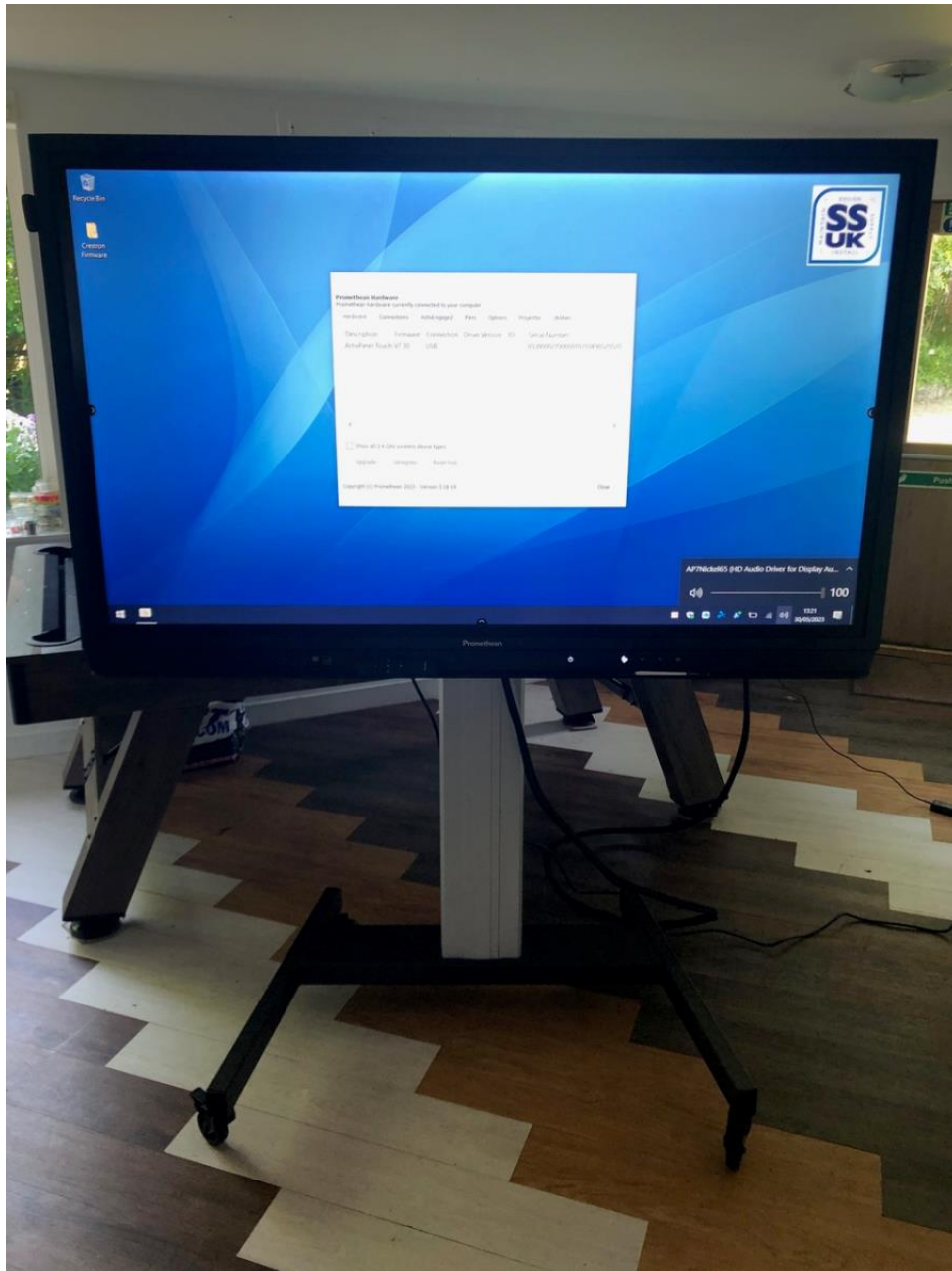
Islay

We have had great use out of the Prometheus board and the single screen in the 'games' room – across all groups in fact, including youth clubs, after school clubs and senior citizens. It is also being used for PIP interviews, training and meetings.

It's a fantastic resource and we couldn't be without it. (T Glover, Islay Development Trust)







Iona

The enhanced IT offering at Iona Village Hall has had a positive impact on the running and use of this community-led, volunteer-run community building but it is yet to realise its full potential due to the limited resources we have had to dedicate to proper setup, training and publicising its availability.

The 'readily-accessible' equipment has been of most use - iPads are used regularly at community events as Point of Sale for bar or food, can connect to the music system readily, and we are trialling the use of a secure stand to allow self-service payments/calendar-checking/bookings as well as shortcuts to 'help' such as our manuals or guides. The laptops have been used in conjunction with our existing

equipment to run film nights, screen sporting events, presentations and a number of other 'entry-level' uses.

The Promethean board has proven useful as it is mobile and readily accessible. As such, it can be used in any space in the village hall, or as an easy alternative to i.e. projector and screen. The plan is to spend some time with the school staff - who are very familiar with the technology - to boost confidence and widen use.

The meeting room setup is the area which has the most potential to be of broad and meaningful benefit to the community, but we have yet to make headway with this. It has been used a number of times, but further training and expert input is fundamental before we can make good use of this equipment.

Despite these challenges, we are confident that the impact will grow as we grow in confidence, and are able to access guidance and advice over the winter months.
(G Bruce, Iona Community Council)





Coll

Current usage:

The bulk of the usage of the new digital equipment at An Cridhe so far has been by a variety of community groups such as Development Coll, Coll Community Council, the local U3A group and the Coll History Society. The equipment has enabled easier access to virtual meetings and has allowed members of these groups to access meetings whilst not on the island. The quality of the sound and video equipment has made these meetings smoother, allowing all members in the meeting room to be heard much clearer and be seen in higher quality video. The equipment in the multi-function room has also been used for talks and presentations, the high picture quality on the screen has made it easy for all attendees to view these presentations and engage with the content. The equipment in the function room can be used in private as the room has blinds, and a lockable door, and therefore does allow users to set up and carry out NearMe meetings. The mobile screen has not been used for any meetings so far, however, has come in useful in a variety of other ways. For example, the Coll Half Marathon used this as a digital information board, providing information to runners and a QR link to live results. It is used daily in An Cridhe to display pictures of local events and of the island and in the future, we would like to display information to visitors about ferries, opening times of businesses etc.

The new projector and large 165" inch screen have both been very well used. Local groups, such as the Growing Group, have used this equipment for film screenings, as well as several large presentations from the History Society, Basking Shark Scotland, and a presentation from Trevor Potts about his

expeditions and more. The image quality from this projector and size of the screen makes presentations visible to many in our large hall and increase all round visibility especially when compared to our previous projecting equipment. Other equipment that was received, such as the laptops, have been put to good use. One has been used to replace our public use PC in An Cridhe, allowing locals and visitors to get online should they not have the ability to do so at home. One laptop has been donated to the Coll Community Council, giving them a single piece of equipment for administration purposes and online meetings. One of the iPad's is now used in An Cridhe to allow us to take card payments in a more streamlined fashion. (S Thomas, Manager An Cridhe)







