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HITRANS
THE HIGHLANDS AND ISLANDS TRANSPORT PARTNERSHIP

Report to Partnership Board Meeting 21st August 2025

RESEARCH AND STRATEGY DELIVERY

Electric Vehicle Infrastructure Shared Service

PURPOSE OF REPORT

To update Members on regional activity by a project management shared service under the Electric Vehicle Infrastructure Fund (EVIF). The shared service covers Comhairle nan Eilean Siar, Orkney Islands Council, Shetland Islands Council and Argyll and Bute Council.

OVERVIEW

In January 2022 Transport Scotland announced a restructure of their electric vehicle infrastructure funding model. Local Authorities are now required to leverage in private sector funding to enable delivery of infrastructure at the pace and scale required to meet demand and encourage further car users to switch to EV's to support the wider climate change objectives, collaborating regionally where possible.

The new proposed structure will allow Local Authorities to access £30 million worth of funding and aims to leverage in a further £30 million of private sector investment, bringing the total investment for Scotland to £60 million. The funding is aimed at identifying market failures to support local authorities in enabling a Just Transition.

Comhairle nan Eilean Siar, Orkney Islands Council, Shetland Islands Council and Argyll and Bute Council are developing a combined EV infrastructure strategy for the region.

UPDATE

Funding

Our EVIF funding was announced on 14th August, with Transport Scotland and the Cabinet Secretary meeting HITRANS and Argyll and Bute Council at a ChargePoint in Oban. We are delighted to reach this milestone in the project, securing funding through to 2030.

Meanwhile, the Contactless Compliance Grant has reopened. Argyll and Bute and Orkney Islands Councils should be eligible to fund 13x 50kW chargers from this and 4 retrofits, releasing the equivalent funding from EVIF for phase 2 of our plans.

Phase 1:de-risking the existing charging network - work in progress

In February 2025, HITRANS commissioned Full Circle Continuous Improvement to complete a maintenance deep dive of public chargers in this shared service.

The maintenance deep dive report was used for three purposes:

- As an action list to discuss immediate improvements with the current maintenance provider
- To shape the development of our regional future maintenance model
- To better understand the features and processes of a back office system and inform our understanding of requirements for the procurement of a back-office service provider as Charge Place Scotland(CPS)'s contract and brand comes to an end

A full progress report is included in appendix A, detailing accomplishments, work in progress, future plans, wider remaining challenges and conclusions.

Procurement for a new back office/charge point network operator is also being finalised at the time of writing, and a supplier should be chosen and informed before this board meeting. Procurement focussed on software features and future proofing in alignment with our network development plans. Migration of all chargers onto the new back office would be completed in 2 phases, with approximately half being moved by the end of this year and half being moved by our deadline of June 2026.

Phase 2: expansion strategy - work in progress

Following identification of the unique challenges and opportunities across the region, a high-level charging network expansion strategy for the region is required by the end of this year as a funding condition.

As private investment and reduced public subsidy is key to the EVIF programme, HITRANS have been focusing on the business model initially.

Relatively low ChargePoint utilisation due to a largely dispersed rural population means a charge point operator is unlikely to make a return on investment from a concession contract.

HITRANS are exploring the idea of whether integrated energy, mobility and digitally connected hubs could provide revenue streams from energy security services and internet provision/data packages. This may form a longer term strategy than the EVIF programme envisaged, but if feasible, the next stage would be to develop ideas into a schedule of deliverables, with the focus on what could be delivered via the EVIF programme.

RISK REGISTER

RTS Delivery
Impact – Positive
Comment – This work supports RTS objectives and the monitoring of their implementation.

Policy
Impact – Positive
Comment – This work supports the development of our Electric Vehicle Strategy Policy, particularly with regards to remote, rural and island provision.

Financial
Impact – Positive
Comment – Cost savings are a direct result of this shared service approach

Equality
Impact – Positive.

Comment – HITRANS support for improving electric vehicle infrastructure helps eliminate the barriers to decarbonised travel for all

RECOMMENDATION

Members are asked to:

- Note the report

Report by: Gemma Robinson
Designation: EVIF Project Manager
Date: 7th August 2025

Appendix A: Progress Report on ChargePoint Maintenance Improvement

Introduction

In February 2025, HITRANS commissioned Full Circle Continuous Improvement to complete a maintenance deep dive of public chargers in this shared service.

At the highest level, the Councils are accountable to the public for the EV charging network they provide, but they have very limited control of both ChargePoint fault fixing and updates to respond with. We needed evidence of the operational challenges to be able to improve on this and enable the councils to provide reliable EV charging that instils public confidence and uptake.

Through focussed data analysis of 12 months fault logs, contract research and stakeholder engagement, Full Circle Continuous Improvement were able to identify the following critical areas of concern with the existing operational model, comprising:

- Service and maintenance delays
- Inadequate communication
- Data inaccuracies
- Contractual compliance issues

The risk and impact on EV adoption of not addressing the maintenance challenges is detailed in appendix 1, compiled by Full Circle Continuous Improvement.

The maintenance deep dive report was used for three purposes:

- As an action list to discuss immediate improvements with the predominant maintenance provider in the region
- To shape the development of our regional future maintenance model
- To better understand the features and processes of a back-office system and inform our understanding of requirements for the procurement of a back-office service provider as Charge Place Scotland (CPS)'s contract and brand comes to an end

This report details the progress and plans made and challenges encountered to date.

Operating Model

For reference, the operating model of current Council ChargePoint's in the region is described by the diagram in appendix 2.

Within the fault process, CPS are responsible for monitoring the 'heartbeats' of the charger, detecting faults, basic remote diagnosis and notifying the council's chosen maintenance provider of faults.

The maintenance provider then have a tiered response process, raising fault tickets, resolving or escalating faults until the charger is operational again, then closing the fault ticket. Repairs are carried out under warranty, maintenance agreement or ad-hoc.

In Argyll and Bute and the Western Isles, all chargers are covered under **maintenance** agreements that are **serviced** from the mainland. Service Level Agreements (SLAs) govern fault response times, but resolution time is not contractually specified.

For the Orkney Islands and Shetland Islands, the Council is copied into the email from the CPS to the maintenance provider. Trained Council staff determine if the fault can be easily remedied by checking the status of the charger and manually rebooting it where necessary. The maintenance provider is then contacted to resolve the fault or escalate it, which may involve video support if no parts are needed, or may require an engineer's visit if parts are needed (Shetland use a 3 day **pick-up-drop-off (**PUDO**)** delivery service for this)**.** Escalated faults are currently fixed on an ad-hoc basis (unless they are covered by warranty) requiring quote-based authorisation **for parts and travel costs** and a Purchase Order (PO).

79% of chargers in the region are from one manufacturers and one Charge point Operator CPO has sole distribution rights to spare parts for that manufacturer in the UK, so maintenance can only be supplied by that one organisation for the majority of our regional network. Full Circle Continuous Improvement and HITRANS have been in regular discussion with that current maintenance provider for the last 3 months to agree and implement change

Accomplishments

- Teams met online, many for the first time. Roles and contact details were shared so that enquiries can be sent to the person best suited to handle it.
- Councils have set up generic emails for EV management to ensure accounts can be managed during staff absence, as a result of shared best practice.
- Councils had been told historically they could only have one dashboard login, posing a security risk when sharing that login internally. Multiple logins are now possible, so 3 Councils so far have set up new user accounts and CPS applied the correct permissions to the account.
- CPS provided a revised dashboard training guide for Councils, as some hadn't received instruction on the latest updates to the platform.
- MS Teams Channels were created between Councils and the current maintenance provider for all pre-planned and post-visit documents, including a pre-planned maintenance calendar, engineer reports and work orders. This allows Councils to see when visits are planned, increases visibility of planned visits and documentation, and improves audit trails. This service is already in place for other Councils but hadn't been rolled out nationally.
- The CPS Network Manager created a manual fault tracker for each Teams folder too, an overview without going through individual fault tickets on the dashboard.

This is an interim measure until Councils are satisfied with monitoring faults via the dashboard and new communication channels.

- Each Council has been set up in Signal (an instant messaging service) to enable direct communication with current maintenance provider engineers when they are on site or traveling to/from them. Again, this service is already in place for other Councils but hadn't been rolled out nationally.
- All new communication channels are in addition to the emails sent, so Councils do not have to check multiple places for updates but may find those easier in the long term.

Many of these initial improvements are to communication channels between operational staff and teams. Increasing visibility, understanding and accountability should have an immediate positive effect on the ability to respond to faults and queries effectively.

Work in progress

- Quarterly review sessions will be arranged, to include operational review and to capture and categorise feedback received via customer support channels.
- The Purchase Order process needs to be reviewed and verified with each Council, as a pre-agreed limit would enable quicker resolution of some faults. The current maintenance provider is due to evidence how much delay this causes to fault fixing in the region.
- The current maintenance provider is reviewing the classifications of fault codes created by management 3 years ago with front line staff, to check their effectiveness at distinguishing between hardware, communications, RFID and user errors **for fault trend analysis.**
- The CPS Network Manager is working with the service team to ensure the booking of hotel and travel are made within 48 hours of a fault ticket to demonstrate SLA compliance intent.
- Response times mandated in SLA agreements were sometimes being extended past 72 hours to a full year in some cases. The current maintenance provider explained that this is not a reflection on what the SLA is, it's a reminder to their team that something needs actioning or receiving. This means that reports run on fault fixes that run over their SLA are not accurate, making it difficult for Councils to monitor **uptime and** the efficiency of fault fixing through that Key Performance Indicator (KPI). Just understanding this workaround is a step forward, but the impact on performance monitoring still needs addressing.

These actions are largely process changes, requiring a longer timeframe for the operational and financial teams already involved to review and implement change.

Future plans

- Remote charge requests are by far our biggest 'fault' in the region. CPOs do not consider this a fault because it is not hardware, software or firmware related e.g. it is not something they can control, like a user error. From a Council and driver

perspective, the charger isn't working, so it's a fault. Either way, the remote charge label is not a root cause, it is a consequent action. Opportunities to educate the public (e.g. charging instructions, better signage) are not being identified for to make future efficiencies (higher charging success rates, less call centre time on these calls). Remote charge requests need to be logged in a way that aids addressing the cause of these requests. The current maintenance provider cannot currently accommodate this as they can't log a user error against a specific charger with their telephony system, and as it's not a system they own, they can't **commit to** develop**ing** that ability either. An alternative might be a QR code that encourages drivers to feedback details to HITRANS initially as a small trial at some chargers. This could line up well with an outcome defined in our EVIF grant conditions.

- An operational model that addresses the specific challenges and geography of the region needs to be developed and costed collaboratively. This might include:
    - Learning the hardware and software barriers (ie electrical safety limits, software logins) that dictate the skills and personnel for fault fixing at different tier levels
    - Enabling remote first response wherever possible
    - Reducing travel costs for second tier response, which are unsustainable and a financial and operational risk for both Councils and the maintenance provider long term. This might be by
        - Training Council staff **as in the Shetland and Orkney Islands**:
            - To safely carry out a manual reboot after auditing to ensure this is safe (ie if it requires isolation switches)
            - **S**upporting them with more technical fixes via video call if necessary
        - Training and managing local subcontractors to coordinate and carry out second tier response. It's critical this outsourcing **does not fall to the Councils. They have already contracted** the maintenance provider **for these services and if fulfilling that contract requires subcontractors, that should be** managed by the **contractor, in this case, the** maintenance provider**.**
        - Setting up EV champions (local volunteers) to photograph the chargers. This might be particularly helpful in the likes of the outer isles of Orkney and Shetland for example.
    - Providing Councils with a date or period when a given charger will be fixed or visited. It is **c**ritical for Council public relations that they are able to do this.
    - Delivering spares to all Council regions by PUDO
    - Sending automated progress alerts to significantly reduce the resource required to manually monitor chargers
    - Mandating fault fixing timeframes in maintenance contracts. Only the initial fault response time is currently covered by an SLA with CPS. Fault fixing times have to improve to avoid the impact in appendix 1.
- Devise a maintenance priority system for critical charging locations e.g. isolated with no nearby alternatives, heavily used and/or fault prone chargers (particularly those without chargers close by for redirection). Maintenance renewal costs should be based on this rather than as per manufacturers guidelines as they currently are (6 and 12 months for different aspects.) This prioritisation also needs t**o address**

charger communications, as poor digital connectivity is our second most common fault root cause in the region, and will also prevent remote and online support for maintenance.
- Plan for the replacement of chargers, including costs, high fault chargers, and the tipping point at which AC chargers are to be replaced rather than maintained, as their capex cost is so low (approx. £300 for replacement 7kW charger)

These actions are strategic and systemic, requiring sustained broad engagement across all operational teams. Many regional maintenance agreements expire at the end of the year, and we aim to put these plans in place for that renewal date.

Wider remaining challenges

- Some processes are being treated as internal closed systems, where they are not. It was important to highlight how much Councils rely on the information, systems and software to monitor, manage and report on their network. Whilst teams and individuals at the current maintenance provider can be commended for work-around solutions such as SLA extensions, these need discussing with other users of the system to assess impact on additional outputs.
- Significant interfacing between processes/systems is manual, leading to lag times on real time information such as charger status. This includes manual updates between the customer call centre telephony system, the fault ticketing/operations system, Teams and Signal. There is no ability to run integrated reports between these systems either, meaning there is a lack of fully connected information to help with the escalations, trend reporting and utilisation data etc.
- The current maintenance provider is undergoing major restructure at the moment, and we are not aware yet of how this will affect their operations
- There is industry confusion over what counts as a fault from CPO and customer perspectives. Where challenges are immediately solved (e.g. user errors) by the customer helpline, these calls are not logged, and therefore full data on these issues is not available to inform service improvements.
- Although no charge should be possible without payment authorisation, uncollected revenue from CPS is updated 6 monthly. However, there is no clear escalation path for long term liabilities. One Council has identified significant discrepancies in ChargePoint revenue collection, with uncollected revenue at approximately 20% compared to the council's internal threshold of 2%.
- Current customer satisfaction surveys provide overall CPS data but can't be broken down by individual councils or region to analyse trends. All calls with a CSAT survey of less than 7 are investigated but are not identified per region either.
- One CPO has sole distribution rights to spare parts for that manufacturer in the UK, so maintenance can only be supplied by that one organisation for the majority of our regional network

The outstanding challenges outlined above require engagement with wider teams, business management or external consultants. The aim of listing them here is to highlight wider impacts on service levels for longer term consideration.

Conclusion

The maintenance deep dive undertaken evidenced the back office and maintenance challenges impacting the region and supported delivery of change and improvement. Though we are keen to implement all of the bigger maintenance 'future plans' above as soon as possible, it was important to go back to basics, revise those as quick wins and work up, with the aim of evolving a regional maintenance model before the majority of contract renewals at the end of the year.

The discussion around the maintenance deep dive also deepened our understanding of the communications, processes, systems, challenges and software support involved in delivering the charging service we aspire to, meaning that we could translate this knowledge into securing a back office that has the flexibility and future capacity for our regional requirements, as CPS comes to a close and we need to migrate all chargers to a new back office anyway.

And finally, collaborating on the maintenance deep dive across the Councils in this shared service meant we had a larger sample of faults to compare, contrast and learn from, adding quantitative weight to qualitative data and shaping solutions that work regionally.

Appendix 1: Risks in not addressing the maintenance challenges identified

Impact on Electric Vehicle Adoption

The cumulative effect of these challenges reaches far beyond operational inefficiencies. It has the potential to seriously impact public perception, trust, and the broader transition to electric vehicles, particularly in rural and island communities.

Reduced confidence in public EV infrastructure
When faults go unresolved or communication is lacking, the public loses faith in the network's reliability. This is particularly damaging in the Isles, where alternatives are limited and drivers rely heavily on a functioning public charging network.

Perception that EVs aren't viable in remote locations
The high fault rates and extended downtimes reinforce the belief that EV infrastructure is designed for urban areas and is unsuitable for rural or island environments. This undermines national efforts to build equitable, accessible charging networks across all geographies.

Charge anxiety is intensified.
A lack of consistent service heightens anxiety about long-distance or essential travel. Drivers who perceive public charging as unreliable or unpredictable are more likely to delay or reconsider EV adoption.

Resistance to change and cost-related improvements
Island councils seeking to increase tariffs, introduce new infrastructure, or justify investment face resistance when the current network is seen as underperforming. Poor service delivery diminishes the public's willingness to support or pay for future improvements.

Pressure on councils
Repeated failures in service, maintenance, and communication create a disproportionate burden on local authorities, who become the first point of contact for frustrated residents, even when the issues lie with the CPO or contractual arrangements.

CPS CURRENT SET UP