



# APPENDIX 1 - SPECIFICATION FOR IN-CAB TECHNOLOGY - ASSET MANAGEMENT SYSTEM HARDWARE

## Operations - Environment

**DN725643**

**Author:** Simon Legg  
**Version:** v1.00  
**Date:** May 2024

# Contents

1. Introduction and Background
2. Scope
3. Requirements
4. Pricing and Payment
5. Standards
6. Delivery and ordering
7. Contract Management
8. Training
9. Termination
10. Key Performance Indicators (KPIs)
11. Warranty
12. Annexes

## 1. Introduction and Background

- 1.1. The purpose of this document is to outline the specifications for the procurement of in-cab technology [tablet hardware] to be deployed within waste and cleansing vehicles within the BCP Council / Unitary Authority fleet and amongst other field based highways, cleansing and grounds maintenance staff.
- 1.2. This technology will deliver real-time *in-cab* and in-field job allocation, route information and job completion updates back to the centre for the operational efficiency for our drivers and operators. The technology is a critical part of the transformational efficiencies required to be delivered by the recently procured corporate geo-referenced asset management system, *Causeway*.
- 1.3. BCP Council is a Unitary authority which amongst its other responsibilities must deliver the collection, processing, recycling and disposal of domestic, trade and commercial waste for the BCP area.
- 1.4. BCP Council is in the process of transforming into a modern and transparent council and is committed to the improvement of customer service through the efficient consolidation, digitisation and automation of services wherever possible. These strategies aim to improve service delivery schedules and drive down costs by removing time consuming manual processes, saving resource, speeding up customer response times and supporting centralised data recording and service reporting - in line with the corporate target operating model. These data can then be used to maximise customer intelligence and eliminate inefficient workflows to further improve service delivery and efficiency.
- 1.5. BCP Council have recently procured a new geo referenced asset system Causeway which will enable the delivery of a modernised waste collection service, as well as providing an asset database for numerous other, service related assets in the BCP area.
- 1.6. This procurement of *in-cab technology* will put the asset database, asset locations and route guidance information in the hands of the council staff collecting the waste. Tablets with Causeway installed on them have already been successfully implemented for Environments Highway inspectors and Aboricultural teams.
- 1.7. The system will in due course, allow integration with the BCP CRM system, Dynamics365 CE, providing electronic updates to customer collections [missed bins etc.], other job completion updates, reducing both failure demand and customer response times e.g. BCP service desk calls.
- 1.8. It will reduce or eliminate the need for teams in vehicles and other staff to return to base to receive updated collection information, or indeed dispatch additional teams to collect waste, as this information will be supplied directly to them on their devices, in the field, remotely.
- 1.9. This procurement is a far more significant tablet purchase due to the volumes and the need to install the equipment in upwards of 50 BCP vehicles, which will require a more formal approach to supply, install and to support them.

1.10. Key stakeholders for the delivery of this project include Environment services [business owner/user] ICT [desktop infrastructure, support and integration] and Customer services [CRM business processes].

## 2. Scope

- 2.1. The scope of this project includes the procurement, supply, installation, ongoing re-supply and maintenance of in-cab tablet hardware technology for our entire fleet of waste and cleansing vehicles [see Annex 1 and *in field* cleansing and grounds workers. The tablets will be integrated with the Causeway asset management system and provide real-time data access, route information, job updates, communication capabilities, CRM system customer updates [once implemented] and route navigation support.
- 2.2. The contract period will be for 3 years with an option to extend annually for a further 2 years [3+1+1] Therefore, if all extensions were taken the full length of the contract would be for 5 years.
- 2.3. The supplier will initially provide approximately x55 of 8" Android tablets to the agreed specification and timescale on request for in-cab use.
- 2.4. The supplier will supply and install the required in-vehicle mounting and charging systems associated with the BCP fleet vehicle list [see Annex 1]
- 2.5. The supplier will subsequently provide up to x 60 10" Android tablets to the agreed specification and timescale on request.
- 2.6. The supplier will offer extended warranties [up to two years total] on all the supplied tablets.
- 2.7. The supplier will offer a return to base/replacement warranty service and manage this, for both the initially supplied tablets and any subsequently supplied tablets.
- 2.8. The supplier will after contract signing, be able to supply the tablets and install mounting and charging systems for the required number of tablets above at 2.3 for in-CAB use within 30 days of a request /Purchase order being received in writing by BCP council.
- 2.9. The assets will, once received on-site, be owned and managed by Environmental services at BCP Council. BCP Council's IT department will record these assets centrally.
- 2.10. The supplier will be provided with a copy of the BCP council Fleet vehicle list for which in cab mounting and charging systems require installation.  
*See Annex 1*
- 2.11. There is no exclusivity on this contract and the council reserves the right to procure tablets and associated equipment elsewhere during the term of the contract

### 3. Requirements

- 3.1. The supplier will supply the tablets, mounting systems, charging systems to specification and install those mounting and charging systems in the specified vehicle types listed below.  
These must be compliant / suitable for use with the tablets supplied for in-vehicle use].
- 3.2. The supplier will fit the mounting and charging systems to all the vehicles listed in the fleet vehicle list given in Annex 1 to this document. This vehicle list may be subject to minor changes as vehicles may be purchased or replaced as part of normal replacement activity.
- 3.3. Mounting and charging systems must be installed in a way to meet the **required safety standards stated below at 3.7. and 3.8.** and any appropriate electrical safety standards.
- 3.4. Charging systems will be tested as functional in each vehicle before BCP acceptance of install completion.
- 3.5. Appropriate / separate plug- in/USB chargers will be provided for all tablets, both vehicle mounted, and non- vehicle mounted tablets to allow for charging *outside of vehicles*.
- 3.6. Following the initial vehicle fleet contracted installations, the supplier will supply and install additional mounting and charging systems to the above agreed standards to any additional or newly acquired vehicles within **30 days** of a formal request being made. The customers formal request will include the vehicle type[s] and number of installs required in those vehicle types and the vehicle depot / location of the vehicle[s].
- 3.7. The installed devices must not obstruct the drivers view of the area covered by the arc of the vehicle windscreen wipers, obscure the vision of the driver, their view of vehicle mirrors, must not distract the driver or restrict the driving controls of any vehicle.
- 3.8. The council requires at least 4 weeks notice should a tablet model reach end of life before it becomes unavailable.
- 3.9. Any new models launched as direct replacements for tablets should have evaluation units available free of charge to the Council to allow for testing and configuration with the councils InTune security platform / software deployment / configuration platforms.
- 3.10. New model evaluation units must be supplied 3 weeks before the previous model stops shipping.

#### Hardware Specifications:

- 3.11. Tablet specifications should meet the minimum hardware requirements required for use with the Causeway system as specified below:
- 3.12. **Causeway minimum specifications:** [*please note these are the bare minimum tablet specifications provided by the software supplier that the tablets are to be used with. In relation to screen size the specific requirement is for 7"-8" tablets for in-cab use and 10" inch for non-in cab use*].

## Android Minimum Requirements

Specification	
Screen size	5" & above
RAM	3 GB & above
OS	11, 12, 13 (Please see Android OS Support Policy)
Processing power	1.5 GHz Quad-Core & above, using architecture: <ul style="list-style-type: none"> <li>• ARM 32/64 bit (Android OS 32 or 64 bit)</li> <li>• Intel/AMD x64 (Android OS 64 bit only)</li> </ul>
Storage	16 GB & above
Connectivity	Wi-Fi and 4G (required for remote working)
Camera	5 MP rear facing
Location services	GPS / GLONASS

Source; Causeway Alloy mobile minimum hardware specs V2.2 @16.11.2023

- 3.13. The supplied tablets should be supplied with the *most recent version* of Android OS supported on that device see Annex 2 [OS Support Policy - Android and iOS v1.1 \(1\).pdf](#)
- 3.14. The tablets should meet the following general standards for professional in field use: Ruggedised, water resistant and dust proof tablets appropriate for professional `in field` use, meeting the following standards: [MIL-STD-810G](#) and [MIL-STD-810H](#) e.g. Samsung Galaxy tab active 3 [8"] / Galaxy Tab active 4 pro's [10" ] or equivalent replacement model with appropriate mounting & charging systems installed in each vehicle.
- 3.15. The devices supplied must be compatible with Knox Mobile security software and a commitment from the supplier to support the enrolment of the devices in Knox is preferred. See >> <https://www.samsungknox.com/en/knox-platform/supported-devices>.
- 3.16. The tablets will provide at least 8 hours of battery life under normal usage.
- 3.17. In cab mounting and charging systems will be provided for all the vehicles for use with the 8" tablets. Where available, in-cab mounting and charging systems should be flexible enough - within reason - to be used with slightly smaller or larger tablets later, should tablet manufacturers alter the form factor of their in-cab ruggedised tablet offering, as manufacturer models are replaced.
- 3.18. Where additional / replacement vehicle mount or charging system installations are required, the supplier will endeavour to re-use any pre-installed mounts and/ or charging systems from decommissioned vehicles for any required re-installations where it is:
- appropriate
  - financially efficient for the client
  - safe to do so.

- 3.19. The supplier will deliver additional tablets to the specification within 30 days of an order for additional tablets being received.
- 3.20. The supplier will install the vehicle mounting and charging systems within **30 days** of an order being received to carry out any additional vehicle installations.
- 3.21. **Initial volume purchase:**  
The following number of 8" tablets and 10" tablets required initially are provided below:
- 8" tablets: 55
  - 10" tablets: 60
- 3.22. The supplier will undertake to re-supply and install a similar number of tablets to the latest specifications provided by the client, at volume; 2 years after the first years volume purchases. This associates with the expected 2 year lifecycle of the tablets.
- 3.23. Within the contract period and any agreed extensions, the supplier will provide additional tablets at cost as may be required to replace damaged or broken tablets.

#### **4. Pricing and Payment**

- 4.1. The supplier should provide a clear breakdown of unit cost, installation charges, and any additional consultancy or other fees.
- 4.2. Pricing will be in accordance with the pricing provided in 'Tender Response - Part C - Pricing Evaluation'.
- 4.3. The Council and the Supplier will review pricing annually or when a new replacement tablet model from the manufacturer is launched.
- 4.4. The Supplier will use its best efforts to reduce the pricing and will always provide the most favourable pricing to the Council to the financial benefit of the Council
- 4.5. Requests for increases in price should be notified at least 4 weeks in advance of the annual review to the Council's Contract Manager
- 4.6. The Council does not have to accept any price increases during the term of the contract, and this will only be agreed by the Council where increases are demonstrated and justified sufficiently by the Supplier.
- 4.7. The Council reserves the right to terminate the contract should prices increase above 5%. The Council has the right to terminate the contract upon providing at least 40 days' notice should prices increase significantly.
- 4.8. Payment mechanism will be managed in accordance with the contract terms and conditions.
- 4.9. Annual price reviews will be managed in accordance with the contract terms and conditions.

## 5. Standards

- 5.1. The supplier will meet the standards provided within ISO/IEC 27001:2022 associated with Information security, cybersecurity and privacy protection.
- 5.2. The supplier will be required to meet the standard of compliance contained within The Waste Electric and Electronic Equipment (WEEE) Regulations 2013 Regulations: Waste Electrical and Electronic Equipment (WEEE) – GOV.UK ([www.gov.uk](http://www.gov.uk))
- 5.3. It is desirable the Supplier is accredited to or working at the following standards: -
  - 5.3.1. ISO14001 - Environmental Management Standards
  - 5.3.2. ISO 9001 - Quality Management System Standards
  - 5.3.3. ISO 15408 - Information security, cybersecurity and privacy protection
- 5.4. Products supplied are to conform to EN 301 549 V3.2.1 (2021-03) standards or similar which covers accessibility requirements for ICT products.
- 5.5. The supplier and its operatives will adhere to BCP depot site H&S guidance as provided on attendance at BCP fleet depots, including wearing High Viz vests/jackets and safety boots.
- 5.6. The supplier is required to hold Public Liability insurance at a minimum level of £5,000,000.
- 5.7. The supplier is required to hold Product Liability insurance at a minimum level of £5,000,000
- 5.8. It is a legal requirement that all companies hold Employer's (Compulsory) Liability Insurance of £5 million as a minimum. Please note that this requirement is not applicable to Sole Traders.

## 6. Delivery and ordering

- 6.1. Delivery timeline: Within 30 days of order confirmation.
- 6.2. The supplier will provide detailed delivery information specifying locations, dates, items and quantities for delivery and to whom, for all orders at the time of shipping.
- 6.3. Liaison with customer over site access is requested
- 6.4. The Council will issue an official Purchase Order for each order made.
- 6.5. The Council requires a spreadsheet detailing model and serial numbers of all items purchased per order via email at point of dispatch from factory or warehouse
- 6.6. Deliveries shall only be made during Council opening hours, as per the Council's website.
- 6.7. Devices will mainly need to be delivered to the main administration office of the Council, but if required, devices may need to be delivered to any of the Council's buildings. Provision to deliver to end-user's properties may also be required



- 6.8. Deliveries must be free of charge.
- 6.9. The Council may require that bulk deliveries be repackaged for efficiency and sustainability.
- 6.10. If items are delivered on a pallet, the pallet must be removed from site by the delivery driver
- 6.11. On arrival, each box should have the model and serial number printed on a label, along with that information in bar code format.
- 6.12. The supplier will ensure the goods are securely packaged and arrive at the Council in a satisfactory condition. Any goods that do not meet this requirement will be inspected and returned if defective.
- 6.13. The Supplier should ensure that all invoices list the serial number or service tag of items delivered on that order.
- 6.14. The Council will raise a purchase order for each order and require an electronic invoice for each order.
- 6.15. Provided the Supply is performed satisfactorily in compliance with the Order, and subject to receipt of a valid invoice from the Supplier, the Council will pay the Supplier via its electronic payment system as specified in the Contract or in default within 30 days from the date on which the Council has determined that the invoice is valid and undisputed.

## **7. Contract Management**

- 7.1. Duration: Three-year contract with an option for renewal
- 7.2. A supplier escalation process must be in place for hardware issues, replacements, delivery, defective equipment or other issues that may arise.
- 7.3. BCP Council will require that all IT service contracts details are entered into its Enterprise Architecture Repository at point of purchase or renewal. Suppliers will therefore be expected to supply Service Owners with high level contract details into that dataset.
- 7.4. The supplier shall appoint a named account manager prior to the commencement of the contract, providing name and contact details. The account manager shall have relevant industry experience and have a detailed understanding of the framework, sufficient capacity, and experience of managing contracts of a similar size and complexity.
- 7.5. Due to the varied nature of BCP Councils operations, detailed Service Management expectations will be documented within specific IT solution procurements.
- 7.6. The account manager and their team will need to develop an understanding of BCP Council and its services, culture, and ways of working.

- 7.7. The supplier shall have measures in place to ensure any periods of annual leave or any unplanned absences are covered.
- 7.8. The amount of account management provided by the supplier shall be proportionate to the size and requirements of BCP Council.
- 7.9. The account manager should hold quarterly review meetings with the council. The meetings should include new hardware developments, supply concerns, maintenance, upgrades, updates, any faults, any anticipated supply or service charge increases and review the performance and issues. The supplier will be responsible for providing the data for the quarterly review meetings.
- 7.10. Below is a list of the Service Level Performance Measures that the council will measure performance against. The supplier is required to provide the relevant performance data to be discussed at quarterly review meetings. These Service Levels will be reviewed at each contract Break point and the council will make necessary alterations to the Service Levels with the supplier:

Service Level Performance Criterion	Description	Service Level - Fail (Red)	Service Level - Warning (Amber)	Service Level - Pass (Green)
Tablet supply	Within 30 days of a formal request being made in writing	<95%	95% - 99.8%	99.9%-100%
In-cab mounting and charging systems successfully supplied and installed	Within 30 days of a formal request being made in writing	<95%	95% - 99.8%	99.9%-100%
Invoicing	Invoices are to be submitted to The Council correctly first time	<95%	>=95% and <100%	100%

- 7.11. Sustainability reports will be required on request to show that the supplier is implementing to support environmental aspects and reduce its carbon footprint in relation to this contract.

## 8. Training

- 8.1. Supplier to provide comprehensive training for drivers and fleet managers on the operation and features of the in-cab tablets
- 8.2. Training materials, including user manuals and video tutorials.

## 9. Termination

- 9.1. The supplier will be required to return any tablet hardware, mounting or charging equipment already procured by the customer on termination of the contract.
- 9.2. The supplier will be required to handover to the Council any data in an editable format (specified by the Council) and in a timely manner to support any reasonable request including but not limited to service review, re-procurement and data transfer to a new supplier.

## 10. Key Performance Indicators (KPIs)

- 10.1. Please see service level performance criteria at 7.10.
- 10.2. This specification document outlines the essential requirements for the in-cab tablet hardware technology. Vendors are encouraged to submit proposals in accordance with these specifications, and compliance with these requirements will be a critical factor in the evaluation process.

## 11. Warranty

- 11.1. All tablets must, as standard, be provided with a 2-year Hardware Service' warranty as a minimum.
- 11.2. The Hardware Service warranty must include the following elements:
  - Extended Warranty is an add on upgrade at time of purchase *except where the manufacturer provides a 2 year warranty as standard*
  - Activation within 45 days of device purchase
  - To cover all manufacturer's defects including battery
  - To include prepaid return shipments
- 11.3. All In cab mounting, charging equipment and installation workmanship will be guaranteed against defects or failure in normal usage for 12 months from the date of install.

## 12. Annexes

### Annex 1 - BCP Fleet vehicle list



Copy of List of Waste  
Cleansing and Trade (

### Annex 2 - OS Support policy Android and iOS v1.1



OS Support Policy -  
Android and iOS v1.1