



Service Definition Document

VivaCity Labs

January 2026

Working with



Introduction to VivaCity

At VivaCity, we provide AI-powered sensors to help local authorities unlock smarter, safer, and more sustainable transport networks. Our award-winning sensors deliver GDPR compliant, real-time and multimodal data, from HGVs to e-scooters, at market leading accuracy levels, empowering data-led decisions that improve journey times, safety, and active travel uptake.



Introduction to the Technology

- **AI-Powered Sensors:** Our sensors can detect, classify, and track 8 core traffic classes (with optional additional classes) 24/7/365 with market-leading accuracy, all without using or collecting personal data.
- **End-to-End Support:** From initial scoping through to installation and ongoing maintenance, our expert delivery team works hand-in-hand with you. We guide every step of the process, ensuring smooth deployment and long-term performance.
- **Actionable Insights:** We provide data on multimodal counts, journey times, speeds, turning movements, desire lines, and Near Miss interactions, helping you target interventions, secure funding, and evaluate outcomes with confidence.
- **Futureproof Platform:** Our technology evolves with your needs, with ongoing feature enhancements aided by 10+ years of continuous AI model training to add road user types, data sets and finetune accuracy levels across classifications.
- **Trusted by the UK's Leading Authorities:** We've deployed over 5,500 sensors to date, and are proud to work with major transport bodies including TfL, TfGM, and TfWM, alongside councils such as Nottingham, Bristol, Liverpool City Region, Cardiff, and Edinburgh.



What's included

➤ **Dedicated Implementation Manager to support during project implementation**
Your main point of contact during initial sensor delivery, including planning, manufacturing, delivery and installation

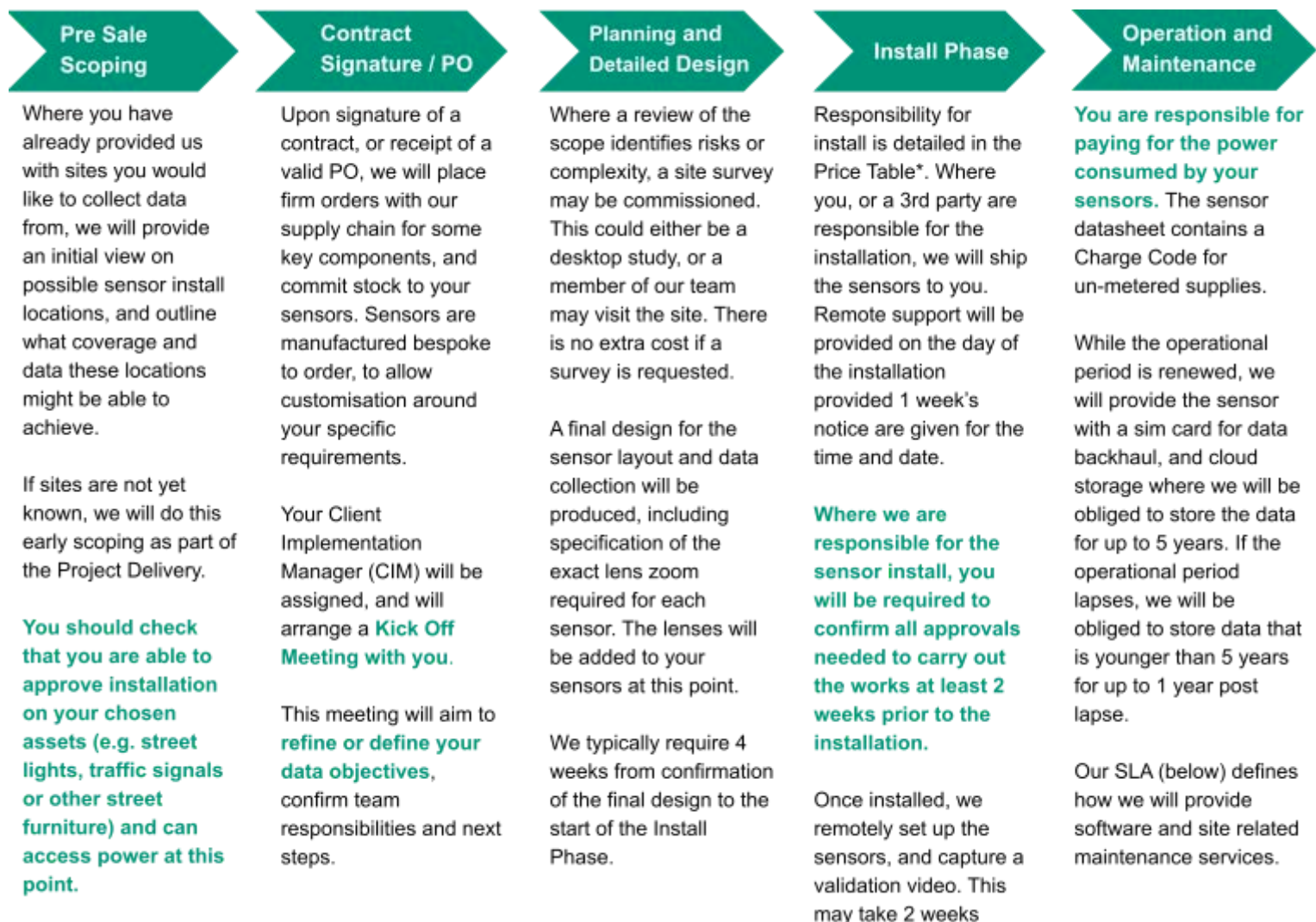
➤ **Customer Support Desk**
Your main point of contact after installation to resolve any issues you may encounter in regards to sensor uptime

➤ **Dedicated Account Manager**
Your main point of contact for high level strategy, commercials, renewals and additional solutions

➤ **Five Year Sensor Warranty**
VivaCity will provide, free of charge, replacement or equivalent sensors in case of irreparable damage

➤ **Software maintenance and upgrades**
Vivacity will periodically maintain its software through updates, patches, and minor performance improvements at no additional cost. Any significant new functionality, modules, or enhancements that substantially expand the software's capabilities will be considered an upgrade and may require an additional fee

Delivery Process



Operation and Maintenance SLA

This Service Level Agreement (SLA) details how VivaCity will aim to respond to any issues that arise during the Operational Period, while Opex payments are being made.

Business Days: Monday to Friday, excluding public holidays, or days between Christmas and New Year.

Business Hours: Between 9am and 5pm on a Business Day.

Type 1: Issues associated with the Cloud Infrastructure

Type 2: Issues associated with the Sensor Hardware

> Urgent/critical issues:

Type 1: If the Dashboard is down, API is not functioning, or $\geq 90\%$ of sensors are not reachable (either across VivaCity's whole estate, or for any one customer who has more than 25 sensors):

- A member of the technical team will be assigned within < 1 hour during Business Hours
- If the problem is likely to last > 2 Business Hours, a communication will be sent to customers or available on our status page < 4 Business Hours of identification
- A resolution is targeted < 2 Business Days

Type 2: A site related issue causing a Road Safety impact:

A member of the company will be available to call back on the phone in response to a ticket to support < 1 Business Hour, and best efforts to provide cover outside of Business Hours will be made, with the aim to support a customer-supplied local team in making the site safe.

> High-priority issues:

Type 1: A part of major Dashboard functionality is not working and there is no workaround, but data is flowing into the cloud storage for later access:

- An initial response will be provided < 2 Business Days, with a resolution expected < 10 Business Days.

Type 2: $\geq 75\%$ of total deployed hardware is not delivering data > 24 hours for any one customer with more than 4 sensors:

- An initial response will be provided < 3 Business Days from the end of the 24h period, with a resolution expected < 20 Business Days, subject to the customer providing confirmation of permits and permission for our proposed traffic management > 5 Business Days prior to our proposed site visit date.

> Standard issues:

Type 2: One or more sensors is not delivering data for > 24 hours:

- An initial response will be provided < 3 Business Days from the end of the 24h period, with a goal of rectifying any issues on site between 4-8 weeks, subject to the customer providing confirmation of any permission for any traffic management < 5 Business Days of the planned site maintenance. Should a faster call-out be required, a day rate for a site crew can be provided. Our standard maintenance fee does not cover traffic management on highly complex sites (e.g. those with a speed limit ≥ 50 mph)
- Where remote logging indicates that the issue is caused by a power feed failure (rectification of which is the responsibility of the customer), we may require the customer to confirm power is live at the commando socket (or equivalent) prior to visiting the site. If the customer confirms power availability erroneously in order to trigger a site visit, they may be liable for the cost of the site visit by our maintenance team.
- Where data from the telecommunications provider indicates lost contact is due to a local cell tower issue, we may not be able to rectify the problem. We will deploy best efforts to re-connect your sensor in this scenario.
- VivaCity are not responsible for resolving data issues caused by foliage growth in front of a sensor field of view, dirt build up on the sensor lens, or changes to the road layout caused by roadworks. Where a customer requires such issues to be fixed, we may be able to quote for additional works to rectify.

Failure to meet these SLAs shall not constitute a breach of contract and shall not entitle the customer to early termination. Any liability for a breach in the SLA shall be limited to the Opex payments for the affected sensors during the affected period.

Sensor Technology



4500+ sensors

In 150+ local authorities

Up to 3 lenses

A single sensor can cover a complex road geometry, offering multiple data feeds

8+ core classifications

Classified Count Accuracy

Distribution of count accuracy by class, across 1,000 Countlines, covering 130,000 road users

Box Plots: Box showing Median and Interquartile Range. Whiskers showing higher of 1.5x IQR or Minima

Accuracy distributions presented are based on calculations weighted by sample size on each tested countline. This avoids biasing data to small sample sizes. Given the large sample sizes available, Median accuracy is most appropriate indicator of the likely accuracy level achievable by a typical new sensor, as it is not impacted by outliers from sensor fields of view that are not well suited to capturing the specific class.

* Mean accuracies have been given for Motorbikes and Busses, as the rarity of the classes meant there was a shortage of samples >5 users per countline required to get a good understanding of the accuracy distribution.



Accuracy on small classes can be limited if the field of view allows large classes to cross between the sensor and the countline, creating temporary occlusion.

Accuracy on larger classes can be limited if the field of view is too zoomed, such that the vehicles fill the whole field of view. Tail of accuracy due to some of our sensor estate being deliberately focused on smaller classes.

VivaCity offer detailed Scoping with our team of experts in locating sensors to help optimise the tradeoff between cost and accuracy based on your own needs. This process is designed to ensure that the classes you are most interested in achieve close to their Median accuracy levels where it is most critical. Our Validation process then gives you comfort that a specific countline is in the expected place on the accuracy distribution.

Cloud Infrastructure

The sensors automatically send data to our hosted cloud infrastructure, enabling you to access the data through the Dashboard, or our API without need for any other infrastructure to be installed on your IT network. The Dashboard includes some simple analysis tools, such as before and after analysis, and speed compliance reports, and allows users to download data for further analysis.

Our API, documented here docs.vivacitylabs.com enables automated integration of our data feeds into your systems, including Drakewell's C2, and Microsoft BI Dashboards.



Features		Dashboard Visualisation	Download Format	API
Classified Counts	Road users detected within the sensor field-of-view, broken-down by 8+ classifications	✓	CSV	✓
Tracks	Visualisation of individual road user movement, differentiated by classification	✓	JPEG	
Turning Movements	Analysis of the volume and turning behaviour of different classes of road user within the field-of-view of a sensor	✓	CSV	✓
Countline Speed	Distribution of spot speeds of detected road users as they cross a countline	✓	CSV	✓
Zonal Occupancy	Average number of road users within a zone in the sensor's field of view. Also includes Stopped Occupancy, the average number of stationary road users within the zone	✓	CSV	✓
Dwell Times	Total stopped time of each road user within a zone of interest, provided as averages or percentiles per road user class	✓	CSV	✓
Classified Journey Times	Addition of ANPR capabilities to enable journey time analysis. Addition of Classifications to journey-times to enable journey times to be split by class	✓	CSV	✓
Near Miss Analysis	Counts, trends and rates of Cyclists vs Motor vehicles and pedestrians vs Motor vehicles near misses to identify and quantify video clips, advanced playback features and filtered contextual data to understand and analyse	✓	CSV	

Case Studies

A photograph of a city street in Liverpool, showing historic buildings and a pedestrian crossing, overlaid with a semi-transparent red filter.

Liverpool City Region is using VivaCity data to drive their Active Travel vision

In 2019 the Liverpool City Region Combined Authority declared a Climate Emergency. Since then, the mayor set out an ambitious vision for Active Travel... [read more](#)

A photograph of several children walking on a paved street, overlaid with a semi-transparent blue filter.

West Sussex County Council used VivaCity data to decide to make School Street schemes permanent

As part of the UK Government's Active Travel Fund (ATF) initiative, West Sussex County Council has introduced School Streets schemes to promote active journeys to school... [read more](#)

A photograph of a city street in Glasgow, showing a tram and historic buildings, overlaid with a semi-transparent dark blue filter.

Glasgow City Council Harnesses VivaCity's AI Solution to Improve Traffic Flow and Road Safety

Glasgow City Council has commissioned sensors at two key intersections on Byres Road: the junction with Church Road and White Street, and the junction... [read more](#)

A dark blue background with numerous small, glowing blue butterfly-like shapes scattered across it, representing footfall data.

Analysing Festival Footfall Data with Salford City Council

As part of Salford Quays on-going regeneration, VivaCity footfall data has been used as a quantitative measure to help demonstrate the continued popularity of the Light... [read more](#)