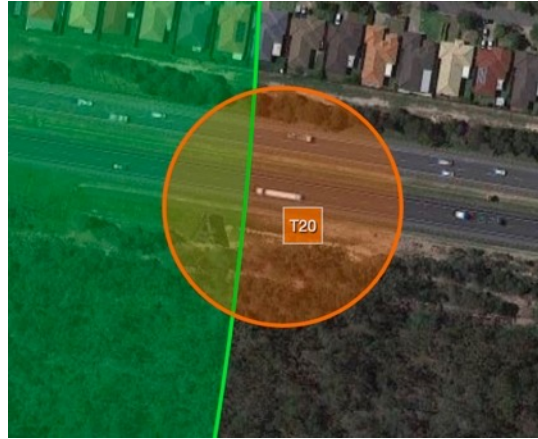


# DYNAMIC GEOFENCE

A Dynamic Geofence attached to an object that moves with the object, is an exciting new innovation at zzoota.

A Dynamic Geofence meeting another Dynamic Geofence, either passing or crossing a Static Geofence creates many possibilities to manage and improve the efficiency of your assets. Monitoring the proximity of assets to work sites, public use areas and restricted zones increases personnel awareness and safety.

The following series of slides present some creative applications of the Dynamic Geofence, followed by a presentation on how to create one.



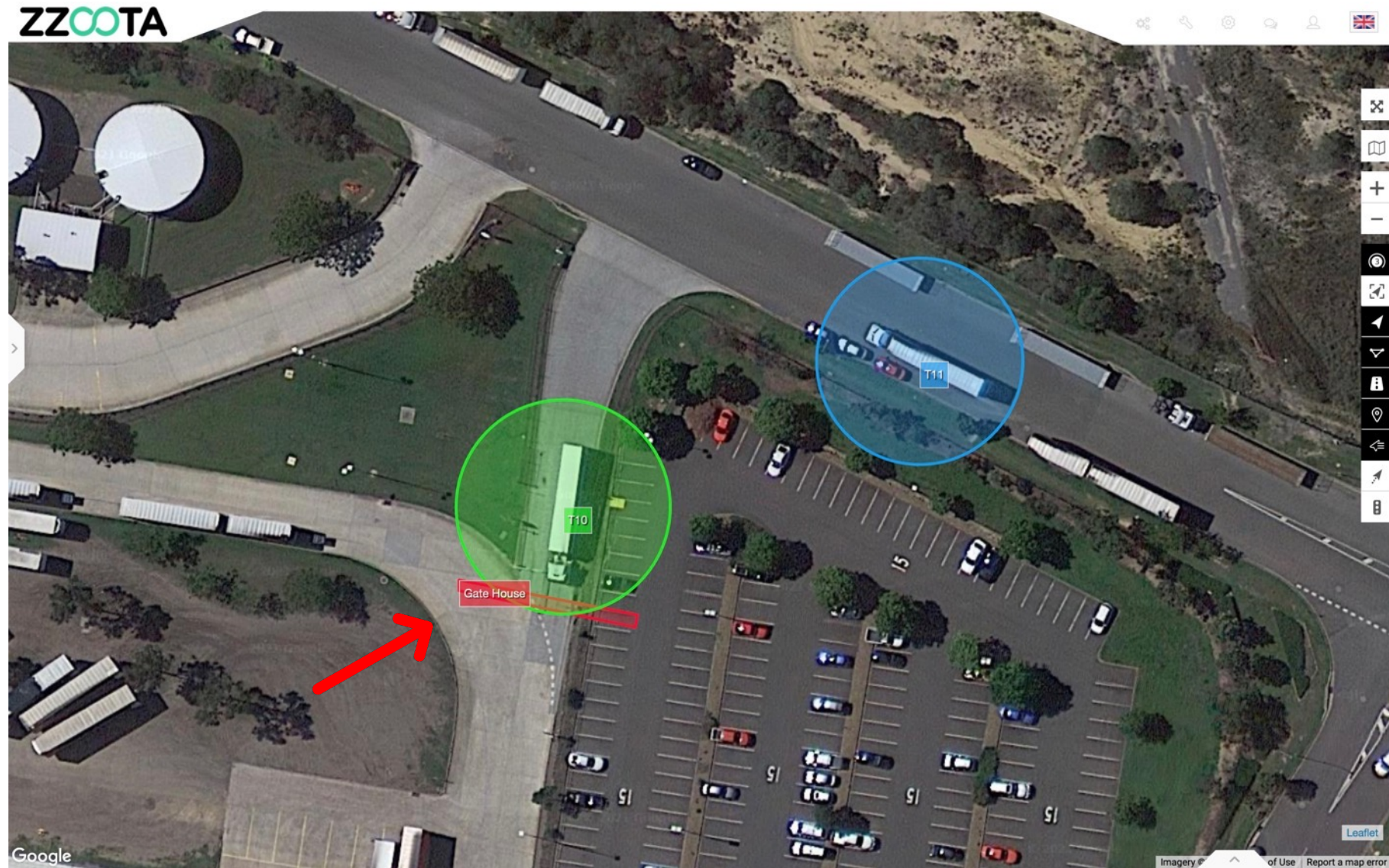
Get notified when a delivery is approaching.

Customise a geofence around the delivery point, when it is crossed by the Dynamic Geofence, receive an alert.

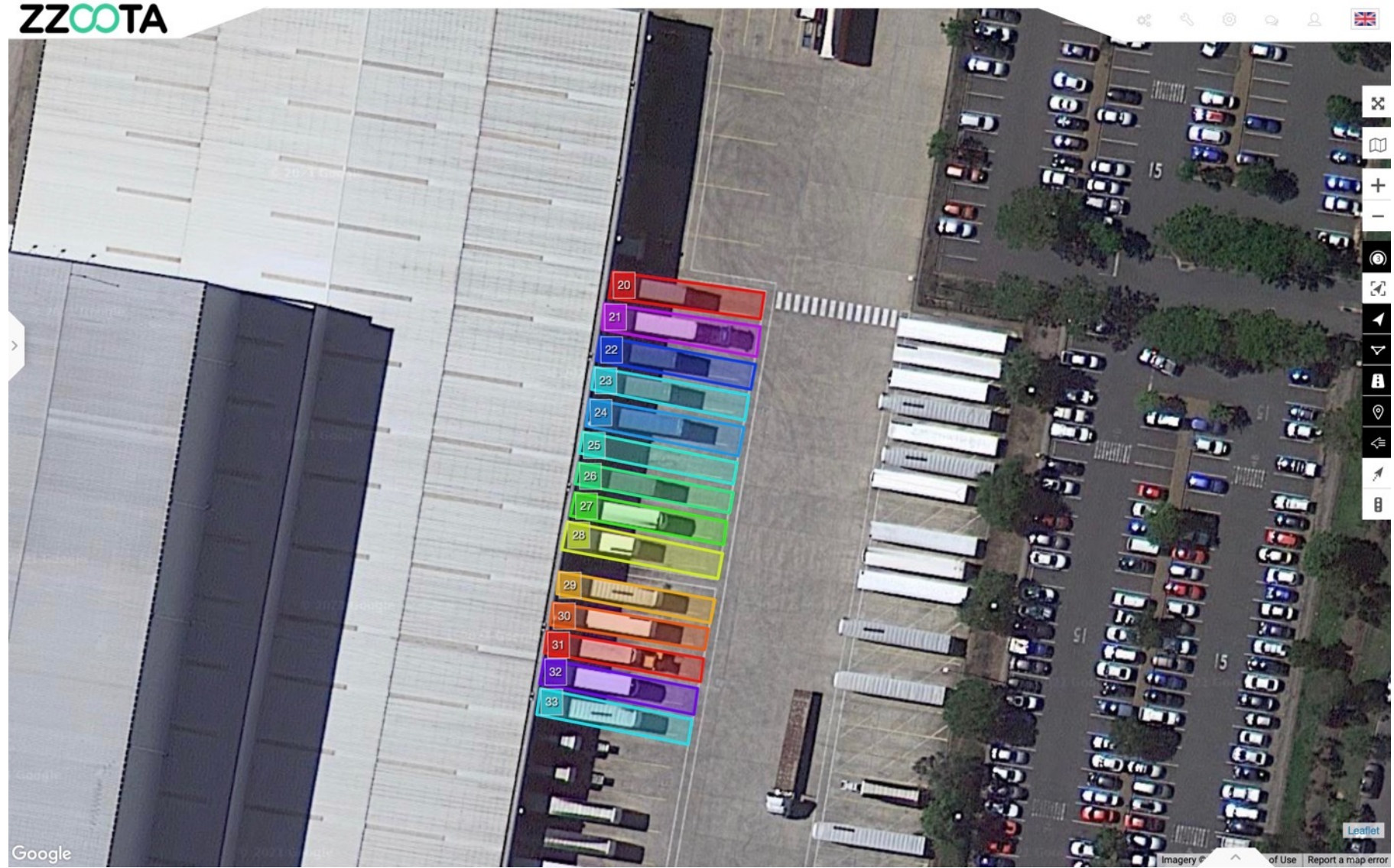


Create an alert for when the delivery is at the Gate House or Entrance.

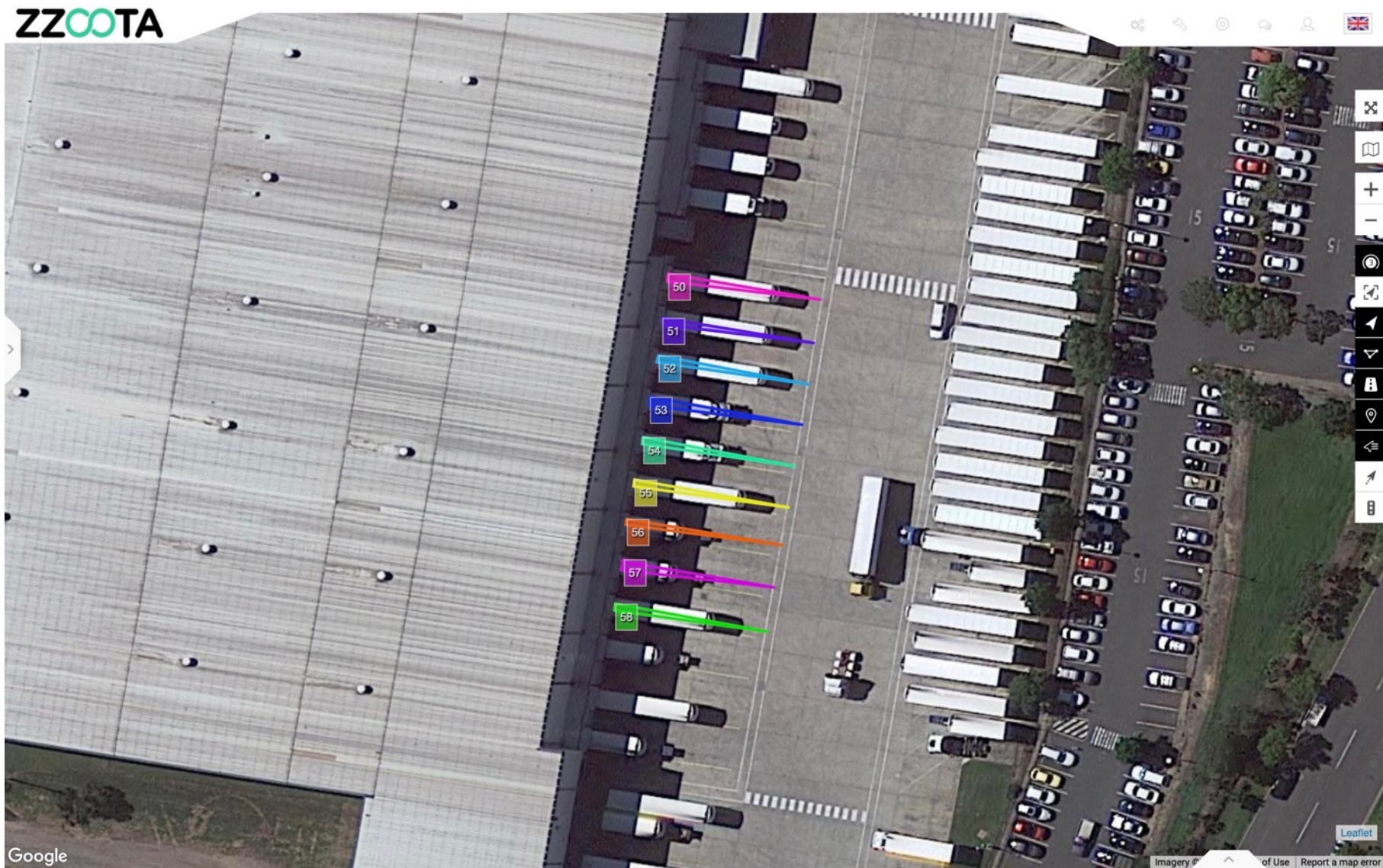
In this example T10 has crossed the Gate House and triggered an alert of its arrival.



Assign an individual geofence to each loading dock.



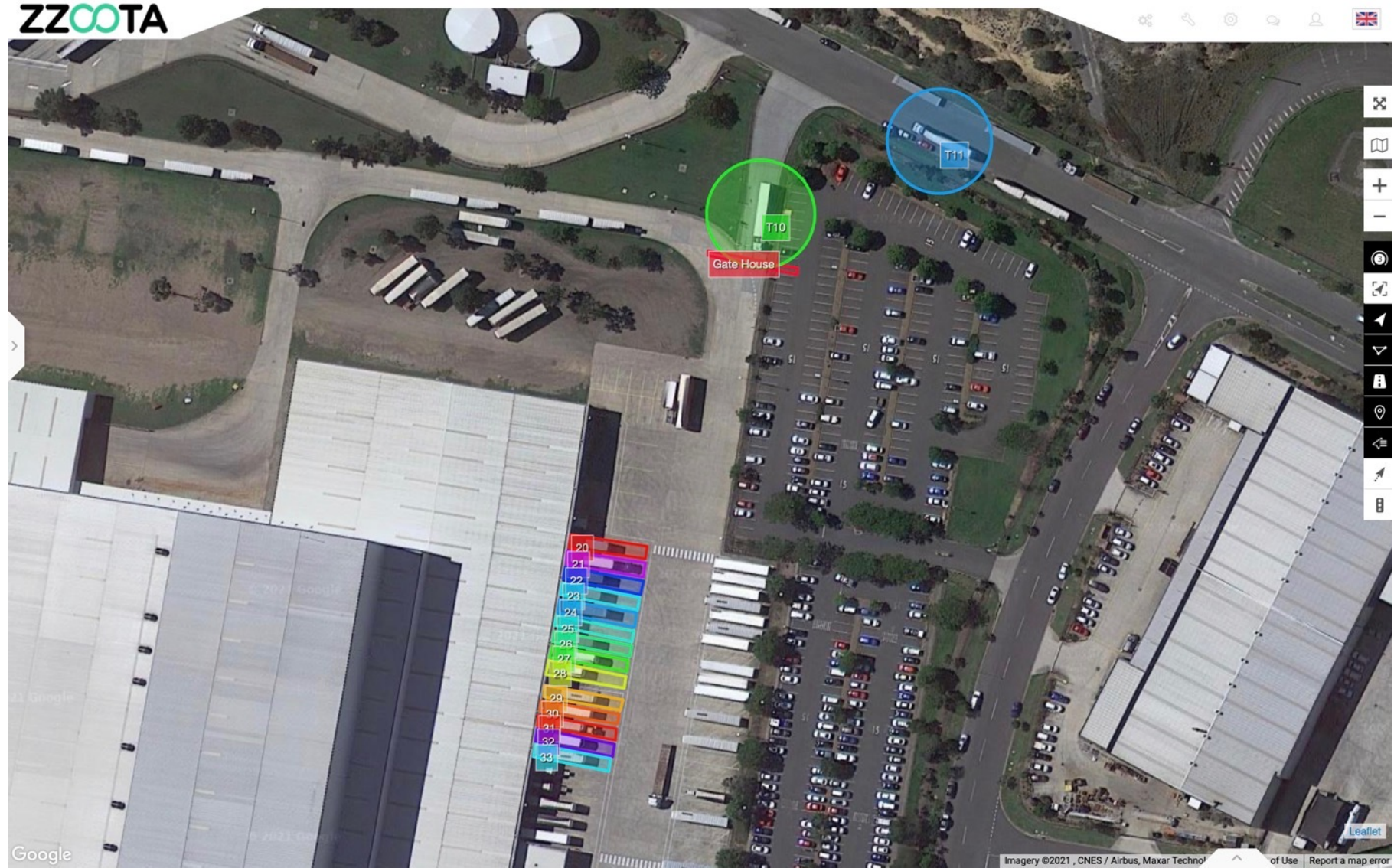
Geofences can be made to any shape of your choosing.



## Practical application :

T10 has been allocated loading bay 28.

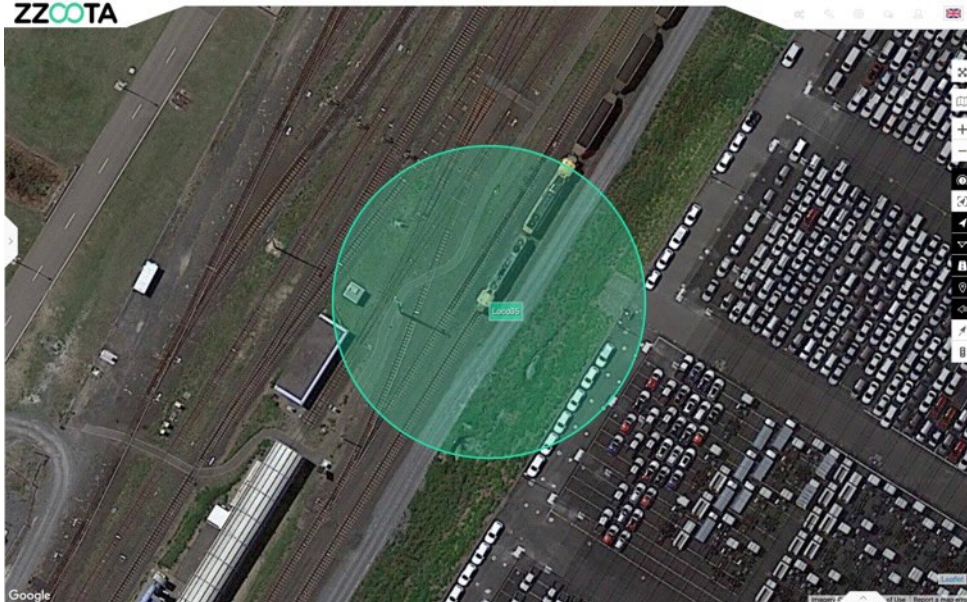
When the truck reverses onto the bay and T10 crosses 28, the automated arrival process will begin. The trailer doors will unlock, the loading dock roller door will open and support personnel will be notified of it's arrival.



Replicate in any location.

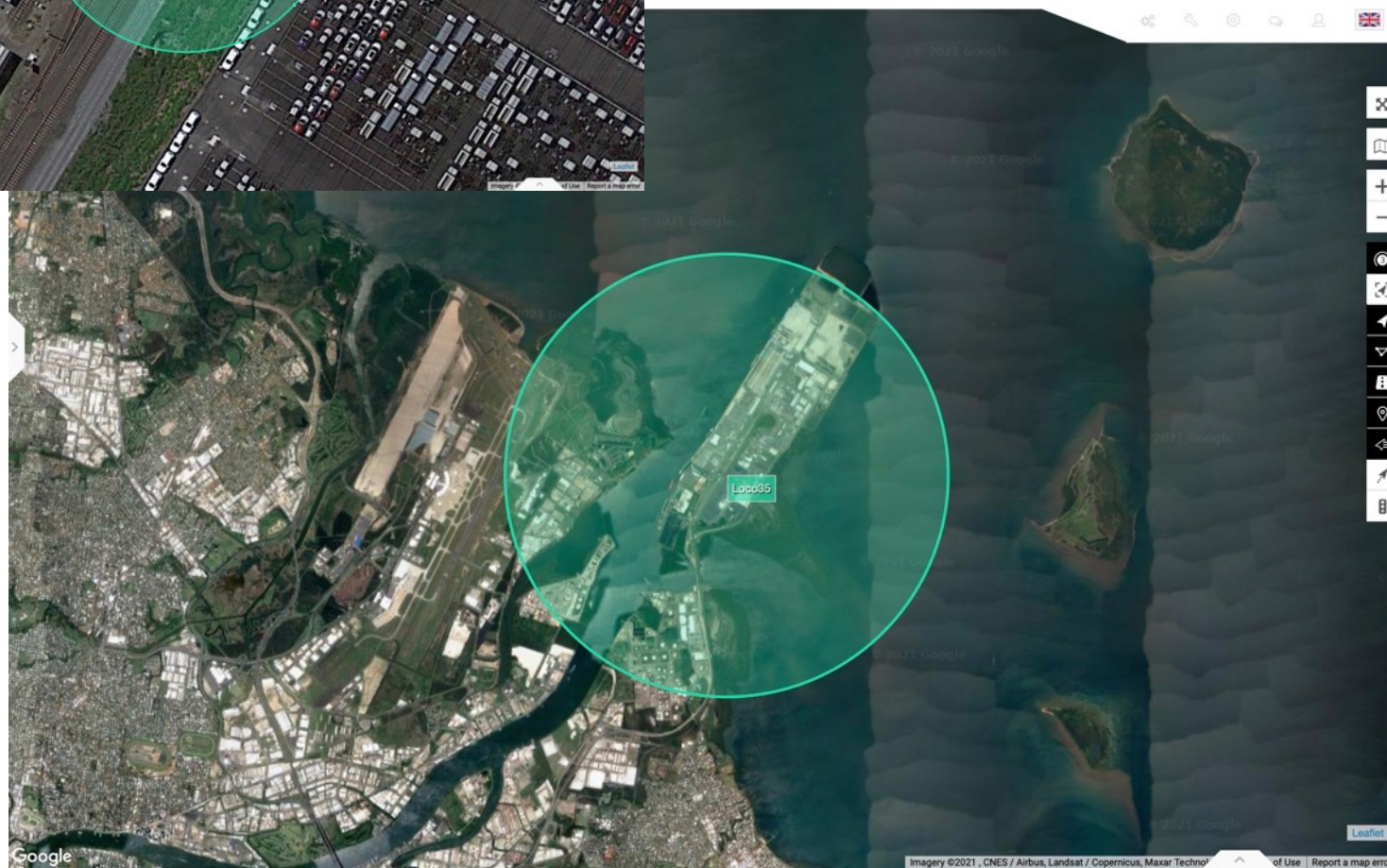






Applications for trains also.

Create a tight Dynamic Geofence of a few meters or a large one Km's in diameter.



# How to create a Dynamic Geofence

## STEP 1

Log into the zootaLink platform and navigate to the Main page.

The screenshot displays the ZZOOTA web application interface. At the top left is the ZZOOTA logo. The main area is a satellite map of a city. On the left, a sidebar contains a list of objects under the 'Objects' tab. The list includes 'Ungrouped (1447)' and 'Pre-start Test Logistics Corp. (11)'. Below this are 11 'Pre-start Test' entries, each with a checked status, 'Not connected' status, '0 kph' speed, and a red dot. At the bottom, a detailed view for 'Pre-start Test 101' is shown, indicating it is 'Offline'. This view includes a 'Sensors' section with various data points.

Object Name	Status	Speed
Ungrouped (1447)		
Pre-start Test Logistics Corp. (11)		
Pre-start Test 101	Not connected	0 kph
Pre-start Test 102	Not connected	0 kph
Pre-start Test 103	Not connected	0 kph
Pre-start Test 104	Not connected	0 kph
Pre-start Test 105	Not connected	0 kph
Pre-start Test 106	Not connected	0 kph
Pre-start Test 107	Not connected	0 kph
Pre-start Test 108	Not connected	0 kph
Pre-start Test 109	Not connected	0 kph
Pre-start Test 110	Not connected	0 kph
Pre-start Test 111	Not connected	0 kph

Pre-start Test 101		Sensors					
Address:	Nothing has been found...	GSM	0 %	VIN	-	RPM	-
Time:	Not connected	Ignition	On	Avg. Speed	- Km/h	Battery	0 Volts
Stop duration:	0h	Engine Hours	-h	Avg. Fuel	0 L/100Km	Speed	0 kph
Driver:	-	Odometer	0 Km	Temperature	0 C		

## STEP 2

From the Main menu select "Tools"

The screenshot displays the ZZOOTA web application interface. At the top left is the ZZOOTA logo. The main area is a satellite map of a city with a river. A red arrow points to a 'Tools' button in the top right corner. On the left, there is a menu with 'Objects', 'Events', and 'History' tabs. The 'Objects' tab is active, showing a search bar and a list of 11 'Pre-start Test' objects, all with '0 kph' and 'Not connected' status. At the bottom, a status panel for 'Pre-start Test 101' is shown, indicating it is 'Offline'. The status panel includes fields for Address, Time, Stop duration, and Driver, as well as a 'Sensors' section with various metrics like GSM, Ignition, Engine Hours, Odometer, VIN, Avg. Speed, Avg. Fuel, Temperature, RPM, Battery, and Speed.

Object Name	Status	Speed
Ungrouped (1447)		
Pre-start Test Logistics Corp. (11)		
Pre-start Test 101	Not connected	0 kph
Pre-start Test 102	Not connected	0 kph
Pre-start Test 103	Not connected	0 kph
Pre-start Test 104	Not connected	0 kph
Pre-start Test 105	Not connected	0 kph
Pre-start Test 106	Not connected	0 kph
Pre-start Test 107	Not connected	0 kph
Pre-start Test 108	Not connected	0 kph
Pre-start Test 109	Not connected	0 kph
Pre-start Test 110	Not connected	0 kph
Pre-start Test 111	Not connected	0 kph

Field	Value
Address:	Nothing has been foun...
Time:	Not connected
Stop duration:	0h
Driver:	-

Sensor	Value
GSM	0 %
Ignition	On
Engine Hours	-h
Odometer	0 Km
VIN	-
Avg. Speed	- Km/h
Avg. Fuel	0 L/100Km
Temperature	0 C
RPM	-
Battery	0 Volts
Speed	0 kph

## STEP 3

Select "Goefencing".

The screenshot displays the ZZOOTA web interface. On the left, there is a sidebar menu with the following items: Alerts, Geofencing (highlighted with a red arrow), Routes, Reports, Ruler, POI, Show point, Show address, Send command, Camera / Media, Tasks, Maintenance, Dashboard, and Sharing. The main area shows a satellite map of a city with a river. A red arrow points to the 'Geofencing' menu item. Below the map, there is a panel for 'Pre-start Test 101' which is 'Offline'. This panel contains two sections: 'Address' and 'Sensors'.

Address:		GSM		# VIN		# RPM	
Nothing has been foun...		0 %		-		-	
Time:		Ignition		# Avg. Speed		Battery	
Not connected		On		- Km/h		0 Volts	
Stop duration:		Engine Hours		Avg. Fuel		Speed	
0h		- h		0 L/100Km		0 kph	
Driver:		Odometer		Temperature			
-		0 Km		0 C			

## STEP 4

Select the “+” symbol to add a geofence.

For Info : When adding a Dynamic Geofence it can be placed anywhere on the zootaLink platform. When the object next moves it will align with the new geofence.



## STEP 5

Choose a “Name”

Choose a “Type”

For Info : Testing has shown that a “circle is more intuitive.

A “polygon” can be chosen however it remains orientated to north and does not turn with the object.

The screenshot displays the ZZOOTA web application interface. At the top left is the ZZOOTA logo. The main area is a satellite map showing a road with a red car icon. A tooltip above the car reads "Mercedes-Benz (0 kph)". On the right side of the map is a vertical toolbar with various navigation and tool icons. On the left side, a configuration panel is open, showing tabs for "Objects", "Events", and "History". The "Objects" tab is active, displaying a message "Please draw a polygon on the map." Below this, the configuration fields are: "Name:" with the value "Dynamic Demo"; "Type:" with a dropdown menu showing "Circle" selected, "Polygon", and "Circle" as options; "Group:" with a dropdown menu showing "Ungrouped" and a "+" button; and "Background color:" with the value "#d000df". At the bottom of the panel are "Save" and "Cancel" buttons. A red arrow points from the "Type:" dropdown to the "Circle" option. The bottom of the map shows copyright information: "Imagery ©2021 CNES / Airbus, Maxar Technol" and "Leaflet".

### STEP 6

Select a "Device".

The screenshot displays the ZZOOTA web application interface. On the left, a configuration panel is open, showing the following fields:

- Objects:** Events, History
- Please draw a polygon on the map.** (Instructional message)
- Name:** Dynamic Demo
- Type:** Circle
- Device:** Mercedes-Benz (highlighted with a red arrow)

Below the 'Device' field is a search input with the text 'pre-' and a search icon. A dropdown list of test names is visible below the search input:

- Pre-start Test 101
- Pre-start Test 102
- Pre-start Test 103
- Pre-start Test 104
- Pre-start Test 105
- Pre-start Test 106
- Pre-start Test 107
- Pre-start Test 108
- Pre-start Test 109
- Pre-start Test 110
- Pre-start Test 111

The main area of the interface is a satellite map showing a road. A red arrow points to a location on the road, with a tooltip displaying 'Mercedes-Benz' and '(0 kph)'. The map includes standard navigation controls on the right side and a Leaflet logo in the bottom right corner. The footer text reads: 'Imagery ©2021 CNES / Airbus, Maxar Technol of Use Report a map error'.



### STEP 7

Choose a "Background Color"

The screenshot displays the ZZOOTA web application interface. On the left, a configuration panel is open, showing the following settings:

- Objects | Events | History
- Please draw a polygon on the map.
- Name: Dynamic Demo
- Type: Circle
- Device: Mercedes-Benz
- Group: Ungrouped
- Background color: #00df74

A red arrow points to the background color selection area, which includes a color picker and a "Save" button. The main map area shows a satellite view of a road with a vehicle object labeled "Mercedes-Benz" and "(0 kph)". The interface includes standard map navigation controls on the right and a footer with copyright information: "Imagery ©2021 CNES / Airbus, Maxar Technol... of Use | Report a map error".

## STEP 8

Drag the mouse to the desired radius.

The screenshot displays the ZZOOTA web application interface. On the left, a sidebar contains the following configuration options:

- Objects Events History
- Please draw a polygon on the map.
- Name: Dynamic Demo
- Type: Circle
- Device: Mercedes-Benz
- Group: Ungrouped
- Background color: #00df74

A color picker is visible below the background color field. The main map area shows a satellite view of a road with a blue circle being drawn. A tooltip above the circle reads "Radius: 50 m" and "Release mouse to finish drawing". A red arrow points to the mouse cursor on the map. A tooltip for a vehicle on the road reads "Mercedes-Benz" and "(0 kph)". The bottom right corner of the map shows "Leaflet" and "Imagery ©2021 CNES / Airbus, Maxar Technol... of Use Report a map error".

### STEP 9

Select "Save".

The screenshot displays the ZZOOTA web application interface. On the left, a sidebar contains configuration options for an object. The options are: Name (Dynamic Demo), Type (Circle), Device (Mercedes-Benz), Group (Ungrouped), and Background color (#00df74). A red arrow points to the 'Save' button in the sidebar. The main map area shows a satellite view of a road with a blue circle highlighting a specific area. A vehicle icon labeled 'Mercedes-Benz' is positioned on the road, with a speed indicator '(0 kph)'. The top right corner of the map shows navigation and zoom controls. The bottom right corner of the map shows the Leaflet logo and copyright information: 'Imagery ©2021 CNES / Airbus, Maxar Technol'.

## STEP 10

You have now created a Dynamic Geofence.

### IMPORTANT : BE PATIENT

The Dynamic geofence will not align with the object until the object moves.

In this example the object is stopped (red).





END OF PRESENTATION