



Geofencing Shared Learning

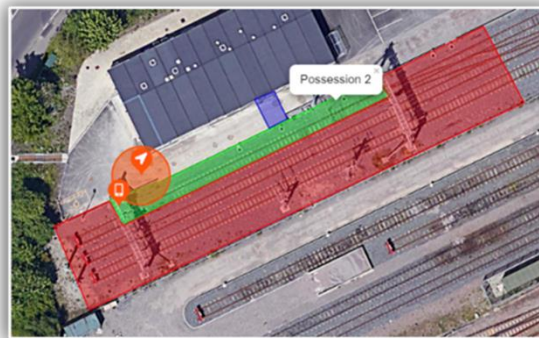
Issued to: **Network Rail line managers, safety professionals and accredited contractors**

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Location: National

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Overview

Throughout April and May detailed testing of Geo Fencing systems manufactured by Onwave and Tended has been undertaken. The testing shows that their systems have been developed significantly and are showing positive improvements.

This Shared Learning relates to Product Acceptance certificates:

- PA05/07418 Issue 6 Onwave - Track Worker Warning System (Geofence)
- PA05/07419 Issue 6 Tended - Track Worker Warning System (Geofence)

Key message

- The Product Acceptance remains unchanged and is subject to further testing.
- The systems can be used ONLY as a Warning device as described in the Product Acceptance conditions where the distance to an open line is more than 3 metres.
- Where the device is used at less than 3 metres from an open line (to provide site management information) there must always be a suitable Safe System of Work in place described within NR/L2/OHS/019.
- Where the device is being used for the transfer of information (such as site management information and situational awareness providing an indication of incorrect location) the system can be used in-line with the rule book requirements (2 metres on 100mph + and 1.25 metres at sub-100mph).
- In all circumstances where the device is used at less than 3 metres from an open line, the supplier must take accountability for making adequate arrangements to clarify the use, document it, and to accept any associated risk.
- Suppliers must not use any 'distance to geo-fence' algorithms until approved by Network Rail Technical Authority to ensure that an exceedance of a protection level of 1 metre will activate an alert on the device that it is unsure of its position.
- The positional accuracy is now much better understood and continues to be tested with focus on:
 - Further evaluation on consistent and timely alerts when positional confidence is lost
 - More detailed evaluation of performance in an electrified railway and power distribution interference levels