

Guidance on Additional Measures for Determined Vehicles

A Document for Temporary Traffic Management Operations in the UK

Prepared by: Incursions & IPV Working Group / TMCA

The Aim & Challenges

Why We Set Off

The Aim

- We had open objectives to address emerging risks.
- Many new products entering the market or crossing over from other disciplines.
- Ongoing queries on when Hostile Vehicle Mitigation (HVM) should be used for Temporary Traffic Management (TTM).
- Untested products being deployed without clear alignment to CDM duties.

The Challenges

- Each TTM setup is unique; there is no "apply to all" approach.
- We needed to avoid being prescriptive about specific types or brands of products.
- Maintaining the document as *guidance* rather than becoming overly instructive.
- Ensuring strict alignment with existing UK legislative frameworks.

Core Concepts

Objective & Scope

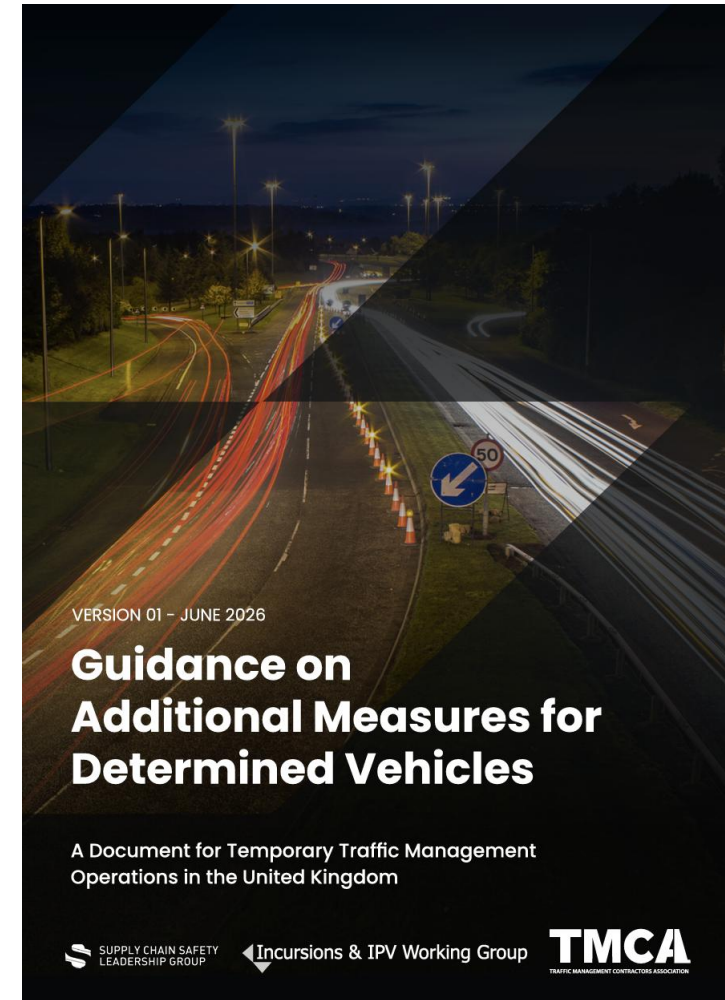
Objective

Provide practical guidance for anyone considering temporary traffic management measures, specifically focusing on the use of **Determined Vehicle Mitigation (DVM)** systems in secondary work zones.

Scope

Intended for principal contractors, TTM organisations, site designers, and implementers.

Covers planning, selection, and use based on risk assessment, hierarchy of control, and site risk levels.



Defining the Threat



Accidental

Driver makes an error due to distraction, confusion, or poor visibility. Typically stops once the error is realised.



Determined

The focus of this guidance.
Intentionally breaches layout despite controls. Characterised by speed, ignoring instructions, and unpredictability.



Hostile (HVM)

Deliberately driven with malicious intent to cause harm or damage. Requires different, high-level security disciplines (HVM).

Mitigation Categories

Definitions

The following terms will be used within this guidance:

	Determined Vehicle	Any vehicle that intentionally or persistently breaches a traffic management layout, despite standard controls.
	Determined Vehicle Mitigation (DVM)	Determined Vehicle Mitigation (DVM) refers to secondary mitigation measures used to reduce the risk of a determined vehicle incursion, identified through a site-specific risk assessment.
	Hostile Vehicle	Hostile vehicles are deliberately driven with malicious or hostile intent, intending to breach safety barriers and damage infrastructure or even cause casualties. This is opposed to the determined vehicle, which is often not deliberately so driven.
	Hostile Vehicle Mitigations (HVM)	Formally defined as “a protective security discipline focusing on reducing risks associated with vehicle-borne threats posed by terrorists and criminals,” i.e. malicious harm vs. accidental incursions or non-malicious intent. HVM approaches are most appropriate to high-risk or crowded public work zones and critical infrastructure, and there is separate guidance for the use of HVM. There is further information available on HVM.
	Safety Barrier	A barrier is “a structure that blocks or limits movement or access”. Without clear distinction between standard obstructive barriers, physical access control systems or delineation devices like cones, this guidance limits its use unless otherwise clarified.
	Secondary Work Zone	The area within (or behind) a primary traffic management layout, where work activities take place. Additional mitigation measures may be required here, reducing consequences from a vehicle incursion.
	Temporary VRS/Temporary Safety Barrier	A temporary VRS is one which can be deployed and removed, and that is to be in place for less than 4 years, while still meeting the relevant performance standards. This concept can also be used for standard safety barriers <i>in situ</i> temporarily.
	Traffic Delineation	Delineation systems, such as traffic cones, traffic cylinders, temporary roadmarkings, and temporary barriers, that visually separate traffic from workers. They do not contain vehicles, but define safe zones and guide driver behaviour, distinct from signage and visual deterrents.
	Vehicle Restraint Systems (VRS)	A VRS is a “system which is installed on a road to provide a level of containment for an errant vehicle, and which has been successfully tested and/or assessed to the relevant part of EN1317”. In other words, a VRS contains, redirects or decelerates vehicles that leave the carriageway to reduce the severity of impact and prevent penetration into protected zones.

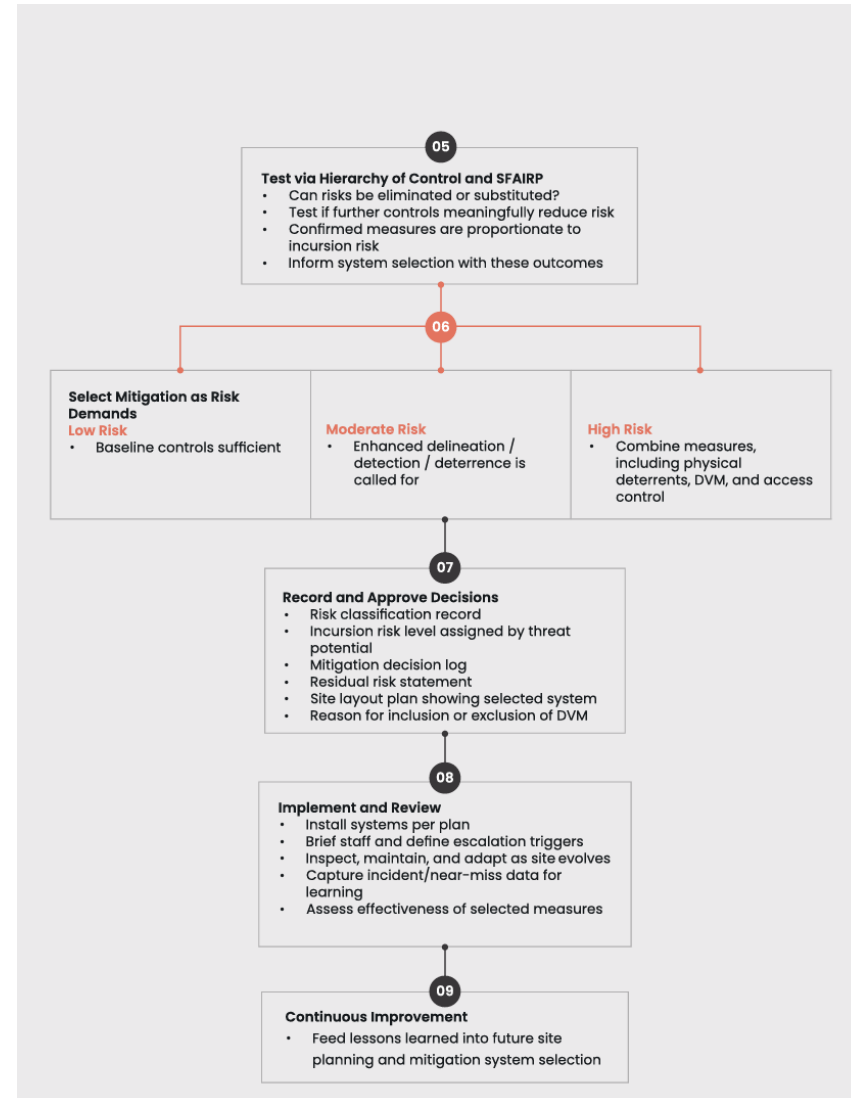
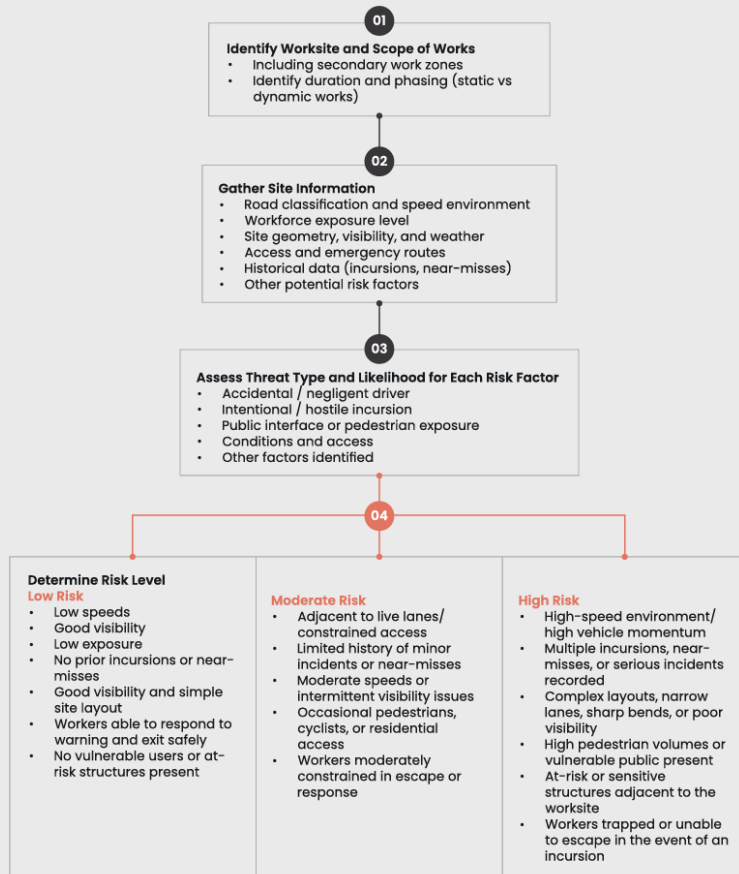
Mitigation Categories

Within incursion mitigation, there are 5 types of mitigation to understand:



Decision-Making Flow

Appendix 1: Decision-Making Flow Chart



Next Steps & Industry Rollout

Immediate Actions

TMCA Member Briefing: We will formally brief this guidance out to all TMCA members to ensure widespread industry understanding and adoption.

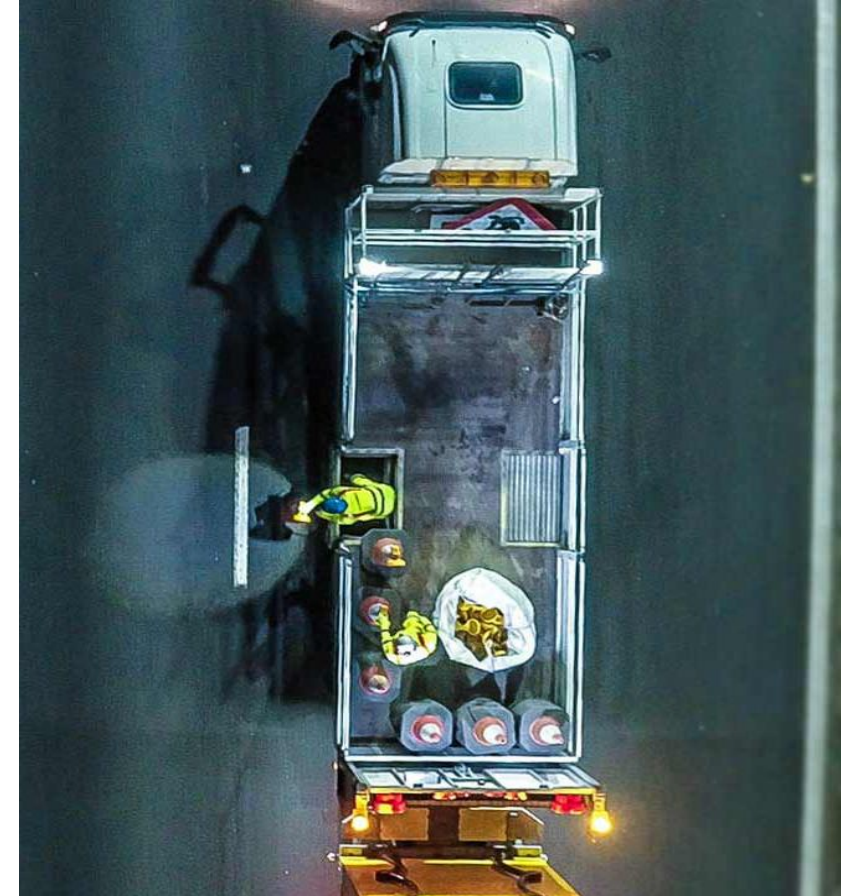
Manufacturer Framework: We are providing a clear, standardised framework for product manufacturers to develop and align their own product guidelines within

Operational Integration

TMP Integration: Ensure all DVM decisions are thoroughly documented within your overarching Traffic Management Plans (TMP).

Pre-installation Checks: Engage with suppliers early to confirm suitability, ground conditions, and system interfaces.

Continuous Review: Capture incident and near-miss data post-deployment to refine internal standards.



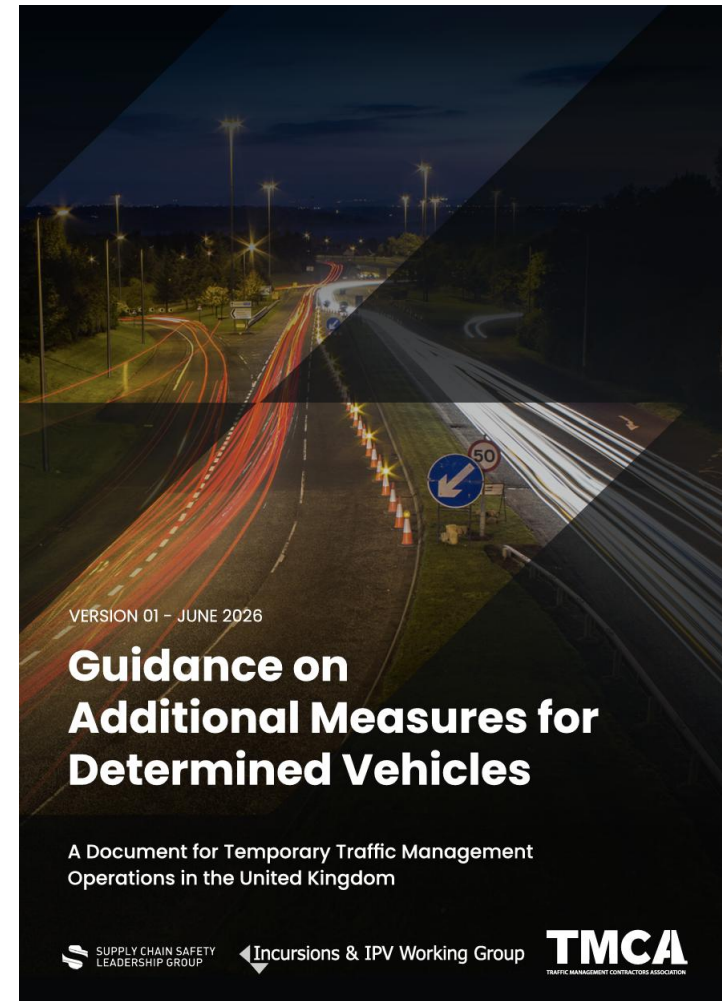
Where to access the document

TMCA Website

This document will be published on the TMCA website as a guidance document (www.tmca.org.uk)

On Request

James and the Incursions Team will have access to the digital version and will be more than happy to share this with your organisations



Questions

Thank you for your time