

Aiming for Zero Road Worker Safety

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Monday 11 June 2012

1. Road Worker Safety Strategy.

RWS Strategic Target No. 1: achieve a substantial reduction in the need for road workers to cross live carriageways on foot by the end of December 2011.

RWS Strategic Target No. 2: aim to eliminate the need for road workers to be on foot on the live carriageway by the end of December 2016.

<http://www.highways.gov.uk/business/32668.aspx>

2. Road Worker Safety Programme.

The AfZ RWS Programme includes research projects and other work streams which have the overall aim of significantly reducing health and safety risks to road workers, in accordance with the Aiming for Zero Road Worker Safety Strategy.

We have four project themes, with each theme containing research projects and other work streams.

1. Continual review of working practices to reduce risks to road workers.
2. Reducing speed and improving compliance through road works.
3. Improving driver behaviour through road works.
4. Improving communication of road worker safety initiatives.

Imagine doing your job here

**RESPECT OUR
ROAD WORKERS**

THINK





Imagine
doing your job
here

Roadworks are a place of work, and the people there deserve just as much respect as you would expect at work. On busy roads, day and night, in all weathers, they risk their lives improving our highways. Keeping them open. When you see roadworks, reduce your speed, drive with more care and keep them safe.

**RESPECT OUR
ROAD WORKERS**



3. “Road Worker” Definition.

“Road workers include all persons working on the Highways Agency’s network who are directly exposed to risks from network users. These include all workers engaged in traffic management activities and incident support services, construction, maintenance and renewal schemes, vehicle recovery operators and any other activities where live traffic is present, such as persons carrying out survey and inspection work.”

For each location, it is the responsibility of the Service Provider to identify a safe method of working, carry out risk assessments (which are appropriate for:

- the type of work
- the duration
- the location and
- other factors



in order to minimise risks to workers) and ensure that a safe method of working is implemented.

4. Road Worker Safety Projects - completed.

111 - AMM 125/10 Innovative Cone Taper Technique, 30.04.2010.

1N1 - AMM 129/10 Risk Based Approach to Safety Barrier Repairs, 15.11.2010.

1P - H&S Toolkit on intranet, 31.10.2009.

4A - Training vehicles for use by the supply chain, 31.08.2010.

1L1 - IAN 142/11 Temporary Barrier Decision Tool, 14.04.2011.

1A – IAN 150/11 Temporary traffic management simplification, 15.12.11.

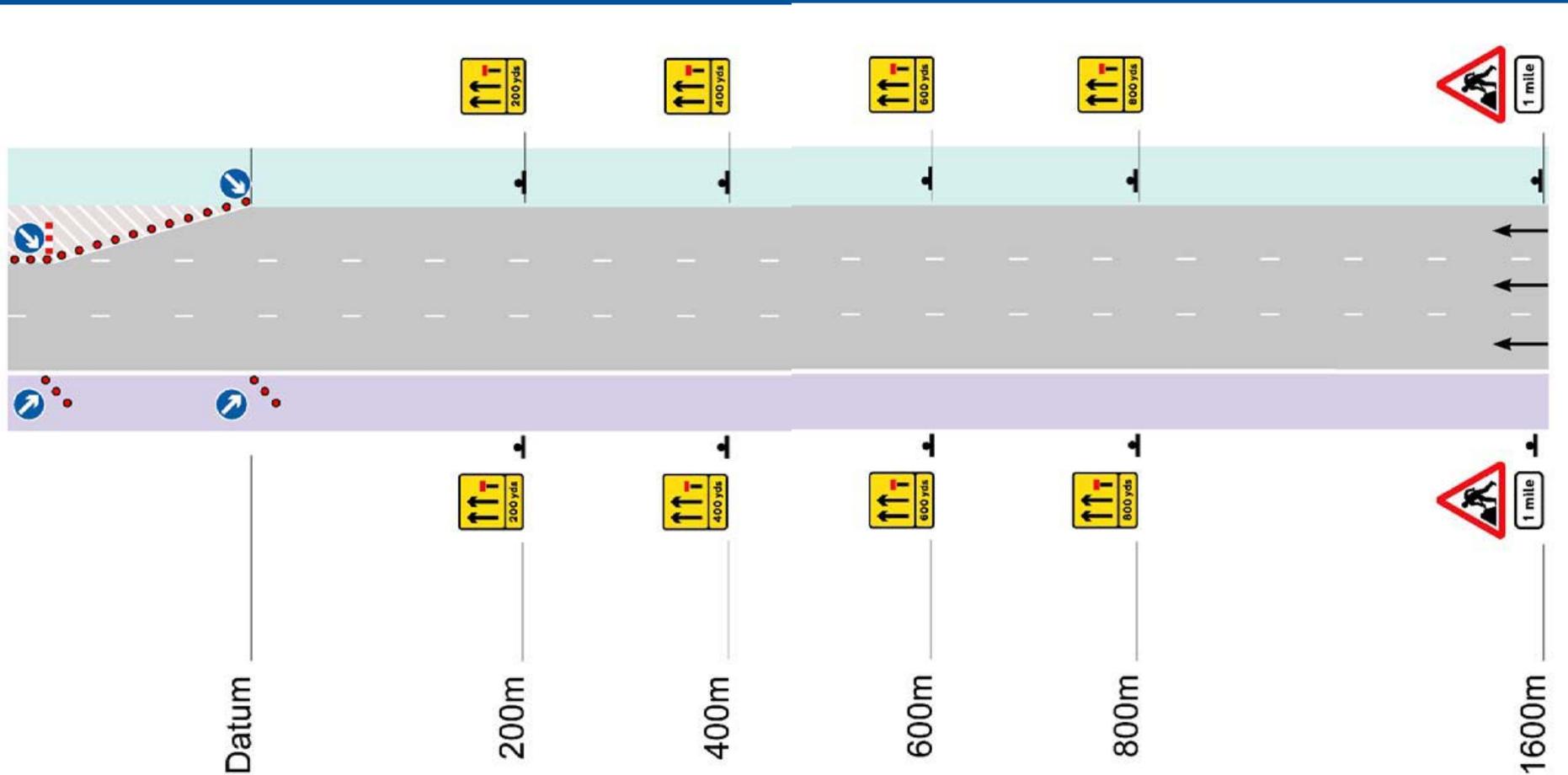
**The new web site “Standards for Highways”
where you can download Interim Advice Notes:**

<http://www.dft.gov.uk/ha/standards/index.htm>

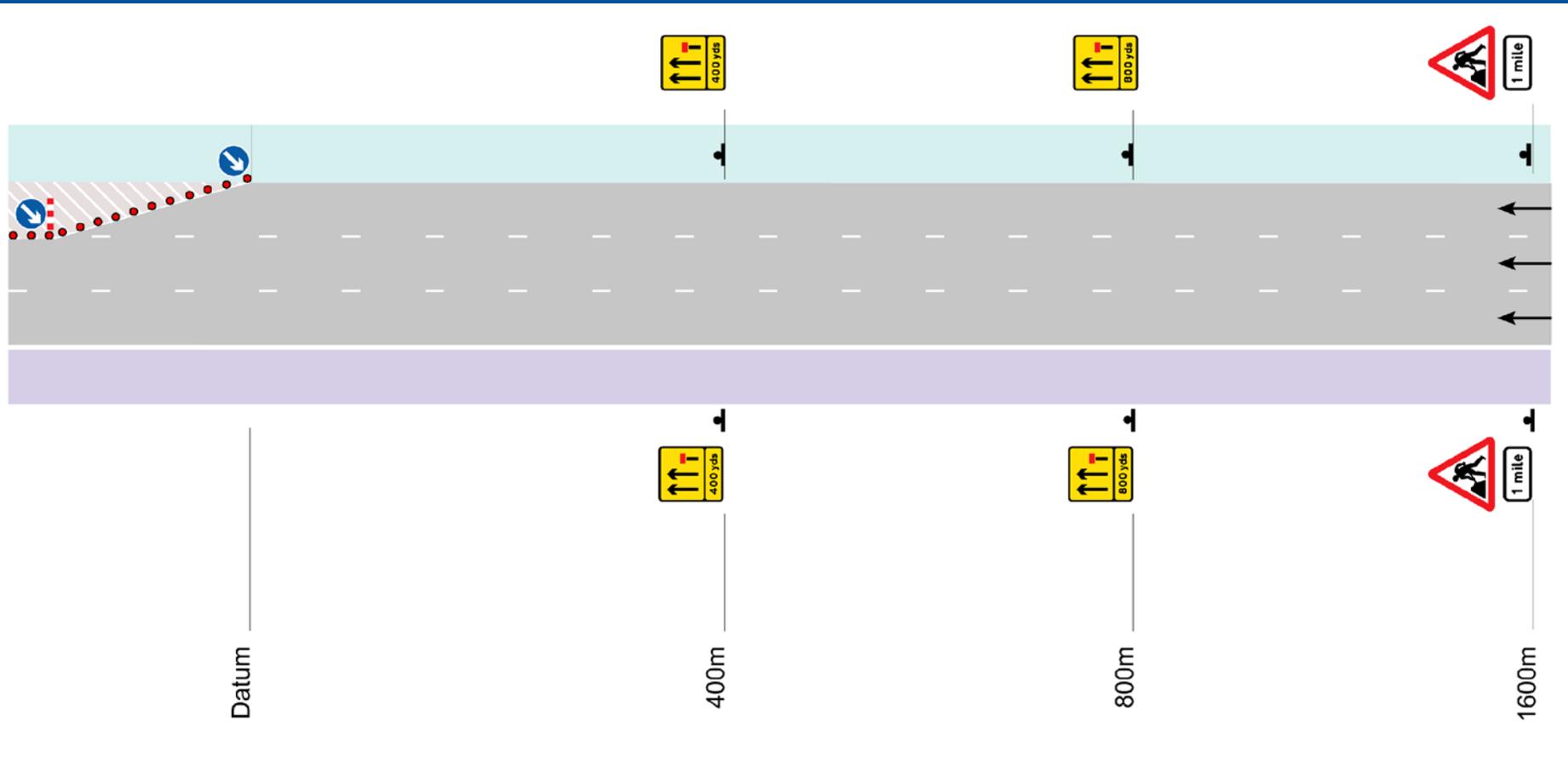
5. Road Worker Safety Projects - ongoing.

- 1B High level signs. Removal of all offside signs on the approach to road works. Provide vehicle mounted high level light emitting VMS on the hard shoulder at 800, 500 and 200 yards.
 - Stage 1, height to top of sign = 5m.
 - Stage 2, height to top of sign = 7.2m.
- 1C1 Use of fixed gantries for temporary speed limit terminal and repeater signs at road works, instead of signs on A frames at ground level.
- 1C2 Use of variable signs and signals on fixed gantries, for advance warning of road works, instead of signs on A frames at ground level.
- 1E Guidance for works on the hard shoulder and nearside verge (revision to IAN 115/08).
- 1J Removal of road danger lamps from cones, downstream of the taper.
- 1M TTM sign designs and sign sizes.
- 1S Offside signs relaxation. Removal of all offside signs on the approach to road works, during relaxation works only.
- 1U Removal of all offside signs on the approach to road works. Provide post mounted VMS on the near side verge or central reserve (remote controlled).
- 1X Investigation in to collisions with Impact Protection Vehicles.
- 2B Stepped speed limits at road works (revision to IAN 137/10).
- 2F Investigation in to Red X and hard shoulder non-compliance.
- 3G Variable signs and signals policy at road works.
- 4E Benefits framework and RWS Toolkit.

RWS Project 1A TTM simplification: Chapter 8 relaxation works, control condition.



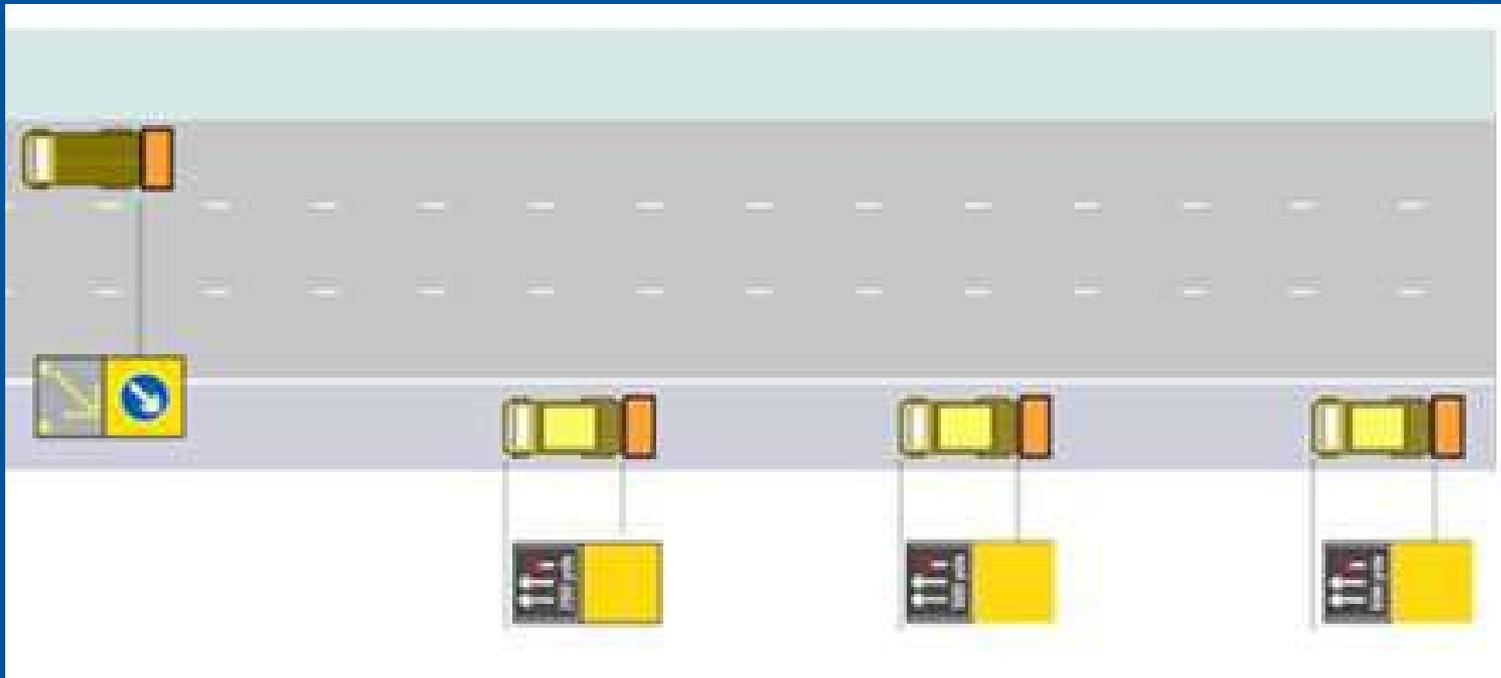
RWS Project 1A TTM simplification: relaxation works, experimental condition. IAN 150/11.



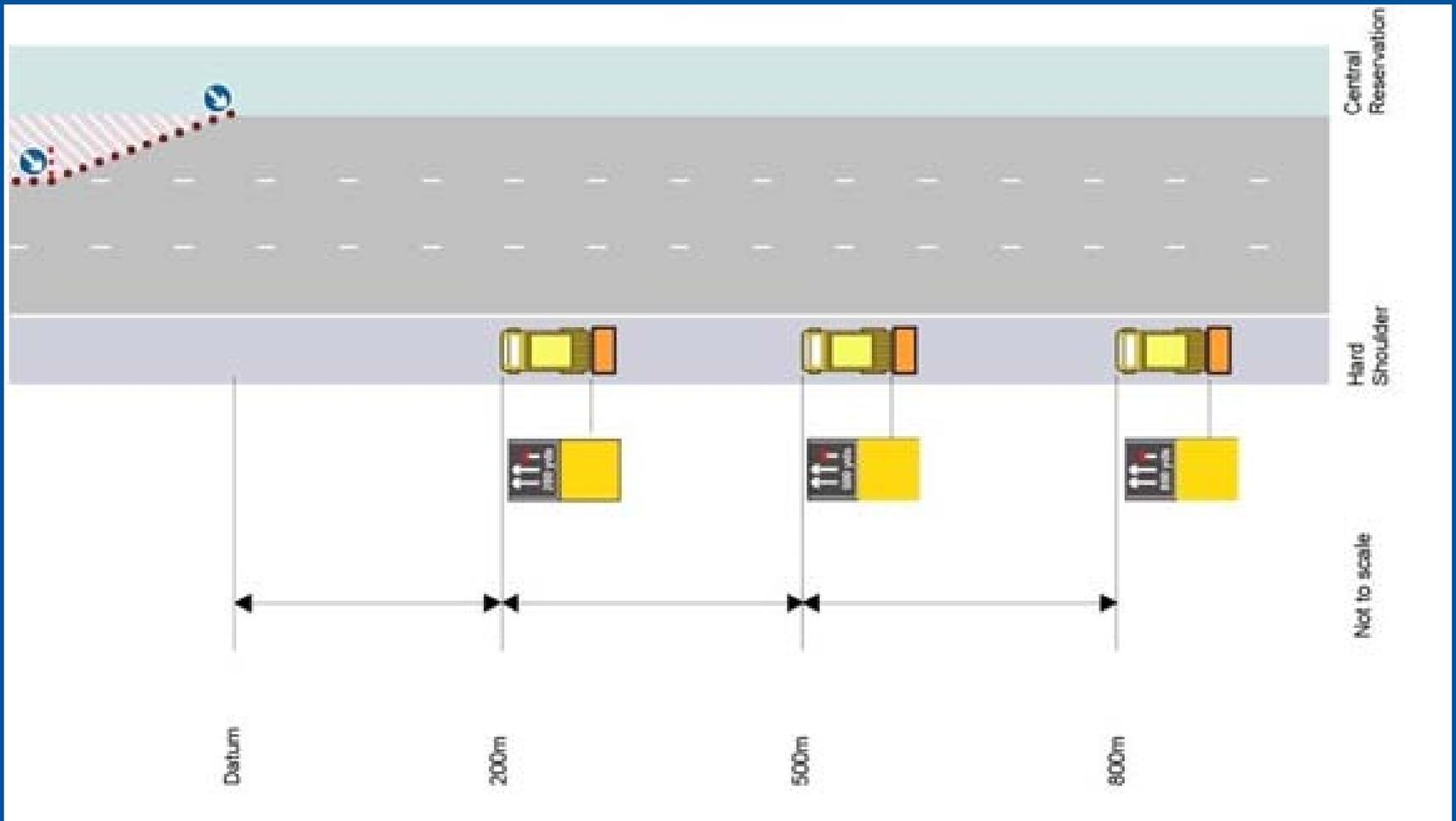
RWS Project 1B Vehicle mounted high level VMS Stage 1 on road trials in Area 12.



RWS Project 1B Vehicle mounted high level VMS.
The cone taper was installed, with an Impact Protection vehicle immediately upstream, an additional works vehicle on the hard shoulder and the three high level signs vehicles.

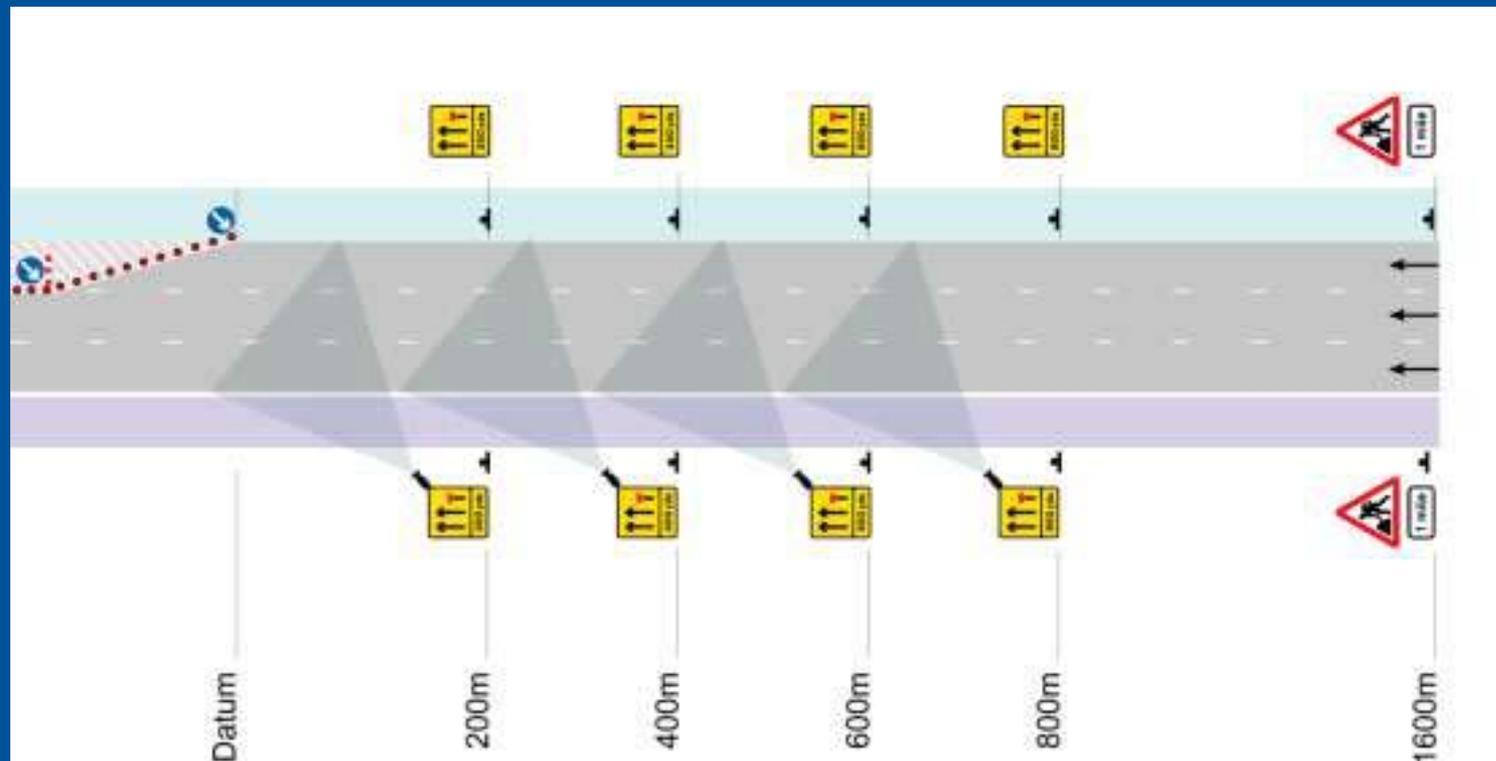


RWS Project 1B Vehicle mounted high level VMS: experimental condition.



Video recording equipment was directed downstream for both the control and experimental conditions.

This diagram shows the control condition.



6. The RoWSaF web site

RoWSaF – The Road Worker Safety Forum.

//RoWSaF*news*

Making roads safer for road workers



RoWSaF Newsletters - Nov 2011.

- Feb 2012.

- June 2012.

<http://www.rowsaf.org.uk/>

7. Summary.

We have met RWS Target No. 1, to achieve a substantial reduction in the need for road workers to cross live carriageways on foot by the end of December 2011, as we have already issued several new guidance documents introducing innovative TTM techniques, including IAN 150/11.

There is still a considerable amount of work to do within the next 4 years, to enable us to meet RWS Target No. 2, to aim to eliminate the need for road workers to be on foot on the live carriageway by the end of December 2016.

8. Key thoughts:

Are you able to use any of these innovative temporary traffic management (TTM) techniques, in accordance with the published guidance documents, where your location specific risk assessments indicate that it is appropriate to do so?

Every day that you are involved with the planning or implementation of road works, just pause for a moment and ask yourself:

- “Am I really content with the safety of the proposed TTM method of working at this location?”
- “How can I ensure that the risks to road workers are significantly reduced?”

9. Respect our road workers.

AAPA 2012 STUDY TOUR QUESTIONS LIST

Road Worker Health & Safety

- 4Q8 How may road worker injuries and fatalities occur on European road worksites?
- 4Q9 What are perceived to be the greatest risks to the road worker?
- 4Q10 What training is available in the safety area and are their formal qualifications?
- 4Q11 What levels of access are provided for safer maintenance of roads?
- 4Q12 How are the user costs of road repair activities captured? What practices are in place to minimise delays to traffic. How is this measured, reported and justified?
- 4Q13 What if any worksite speed limit monitoring and equipment is used and, are there any techniques or traffic calming measures (e.g. temporary speed humps, lane narrowing) used to encourage adherence to posted temporary speed limits?
- 4Q14 Is contra-flow, or use of closed lanes, a usual practice?
- 4Q15 How is the need for safety around road works conveyed to the public? What is most effective?
- 4Q16 How is pedestrian worker safety / protection delivered or managed in congested worksite areas where multiple tasks (e.g. milling, suction sweeping and asphalt placement) are being undertaken almost concurrently?
- 4Q17 Do clients seek surfacing products that supply safer roads – higher skid resistance proprietary products?

Aiming for Zero Road Worker Safety

Further information

Monday 11 June 2012

1. Aiming for Zero Overarching Strategy.

The Highways Agency set out a bold vision in the Strategic Plan, to be the world's leading road operator. A leading operator is a safe operator and with Aiming for Zero we have set out a similarly bold vision for the health and safety of our workforce.

The rationale for this is clear. Every year a small number of people suffer serious injury or die while working on the Strategic Road Network. This is totally unacceptable and we must do more to protect our workers.

Aiming for Zero is our response. It sets an unambiguous goal for our health and safety performance, confirms the Agency's leadership role in the industry and brings together health and safety work across the whole business.

To deliver this vision, the Aiming for Zero overarching strategy was published in April 2010.

<http://www.highways.gov.uk/aboutus/27625.aspx>

2. Aiming for Zero Workstream Strategies.

There are four AfZ work streams:

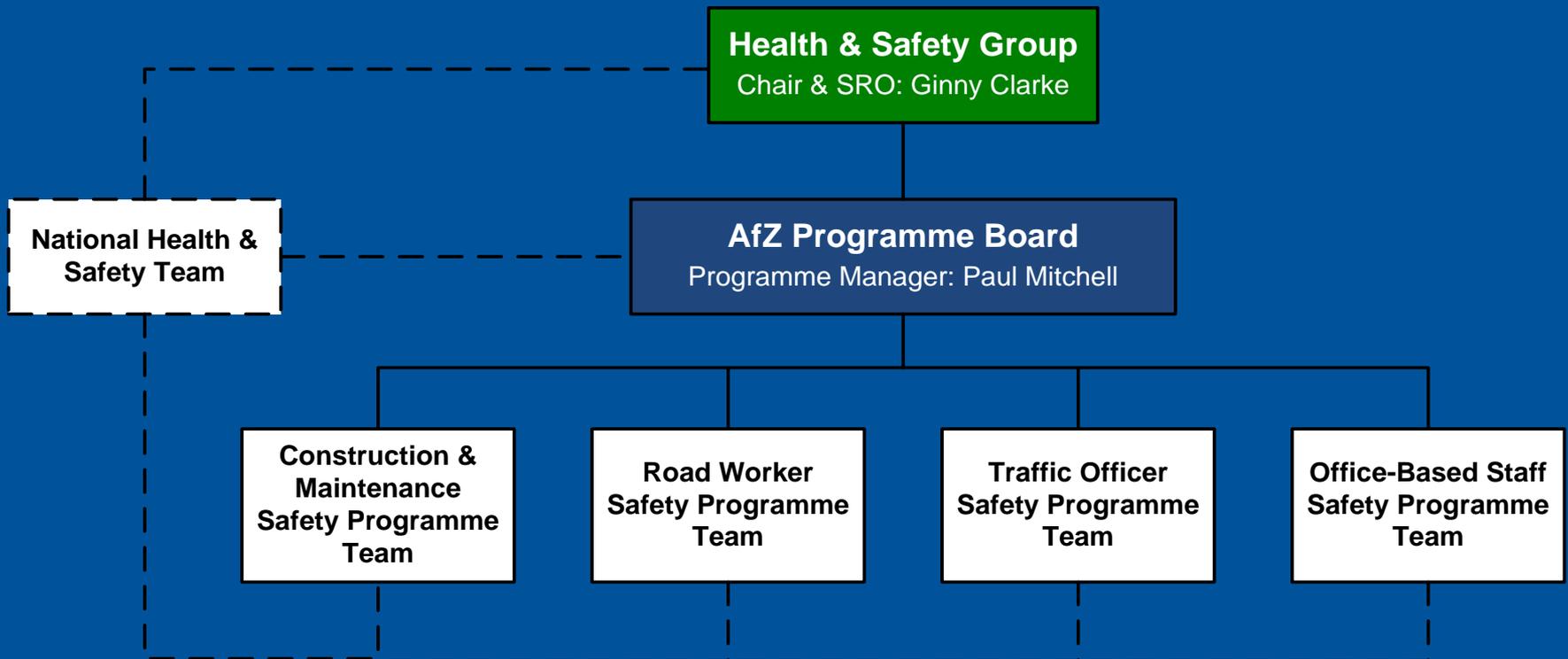
- road worker safety;
- construction and maintenance safety;
- traffic officer safety; and
- office-based staff safety.

We have published individual strategies and action plans for each of these four work streams, to improve health and safety for all employees working directly for, or on behalf of, the Agency. Aiming for Zero is not about discrete groups, however, and we cannot deliver it alone. We need all of our people, both within the Agency and our supply chain, to work together and take action across the business.

That means taking practical steps to drive forward our Aiming for Zero action plans. It also means showing health and safety leadership in everything we do - challenging unsafe activities, reporting accidents and all near misses, and proactively integrating health and safety in to all of our projects.

3. Aiming for Zero Governance Structure.

In August 2010, the Highways Agency established a new Aiming for Zero Governance Structure:



4. The Aiming for Zero Programme Board.

During the past 18 months, the AfZ Strategies were published for Construction and Maintenance Safety, Traffic Officer Safety and Office Based Staff Safety.

The purpose of the AfZ Programme Board, which meets quarterly, is to:

- ensure that a balanced and collaborative approach to implementing the AfZ vision is achieved consistently throughout all parts of the HA.
- ensure that health and safety risks for all employees are significantly reduced.

AfZ Programme Board members are accountable to the Health and Safety Group, i.e. the Senior Responsible Owner (SRO), for the successful realisation of AfZ Programme outcomes.

5. The Road Worker Safety Project Themes.

We have four project themes, with each theme containing research projects and other work streams.

1. Continual review of working practices to reduce risks to road workers.
2. Reducing speed and improving compliance through road works.
3. Improving driver behaviour through road works.
4. Improving communication of road worker safety initiatives.

Theme 1: Continual review of working practices to reduce risks to road workers.

This theme comprises projects to:

- (i) investigate the suitability of innovative working practices.
For example:
 - (a) investigate whether the number of temporary traffic management signs could be reduced for specified situations, in order to reduce the need for road workers to cross a live carriageway;
 - (b) investigate whether the number of cones could be reduced for specified situations, in order to reduce the need for road workers to cross a live carriageway; and
- (ii) investigate whether maintenance and operations guidance documents could be enhanced to reduce the risks to road workers whilst working close to live traffic.

Some of these projects include “on road trials”.

Theme 2: Reducing speed and improving compliance through road works.

This theme comprises projects to:

- (i) investigate different speed restriction methods to reduce the speed of vehicles through road works;
- (ii) improve compliance with speed restrictions at road works; and
- (iii) investigate Red X (on gantry signals) and hard shoulder non-compliance issues.

Some of these projects include “on road trials”.

Theme 3: Improving driver behaviour through road works.

This theme comprises projects to:

- (i) educate drivers with the aim of significantly improving driver behaviour, especially at road works, to encourage road users to drive within the speed limit and to comply with Red X signals when displayed;
- (ii) educate professionals within the HA and the supply chain, to better understand the need to significantly reduce risks to road workers, by changing working practices and
- (iii) educate professionals within Other Government Departments and Agencies and the roads industry, to better understand the need to significantly reduce risks to road workers, by a change in Government priorities and by improved training and education for drivers.

Theme 4: Improving communication of road worker safety initiatives.

This theme is concerned with internal and external communications to HA staff, supply chain staff and other external stakeholders, so that they are aware of the latest developments in road worker safety initiatives.

6. National Highway Sector Schemes.

National Highways Sector Schemes are bespoke integrated management schemes within an ISO 9001:2000 framework. They have been developed in partnership with all sides of the highways industry to interpret the international quality management standard as it applies to a particular activity or industry within the United Kingdom.

<http://www.highways.gov.uk/business/10385.aspx>

Sector Schemes for Quality Management in Highway Works can be downloaded from the UKAS web site:

<http://www.ukas.com/Technical-Information/Publications-and-Tech-Articles/Publications/PubsForCBAccred.asp>

For example: NHSS 12A / 12B Static temporary traffic management on motorways and high speed dual carriageways including on-line widening schemes.

7. DfT Traffic Signs Manual.

The Traffic Signs Manual gives guidance on the use of traffic signs and road markings prescribed by the Traffic Signs Regulations and covers England, Wales, Scotland and Northern Ireland.

<http://www.dft.gov.uk/publications/traffic-signs-manual/>

Chapter 8 (part 1) Road works and temporary situations – design.

Guidance for the design of temporary traffic management arrangements which should be implemented to facilitate maintenance activities or in response to temporary situations.

Chapter 8 (part 2) Road works and temporary situations – operations.

Guidance for planning, managing, and participating in operations to implement, maintain and remove temporary traffic management arrangements.