

Pilot and Trial Projects

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TII Standards Training 2017

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**What is considered a pilot
or trial?**

Pilot or Trial?

- Pilot Project – is an initiative that is outside of current TII publications, policy and management systems (including IT), or any other initiative other than products or materials.
- Trial Project – is the testing of a product or material that is currently not compliant with TII Publications.

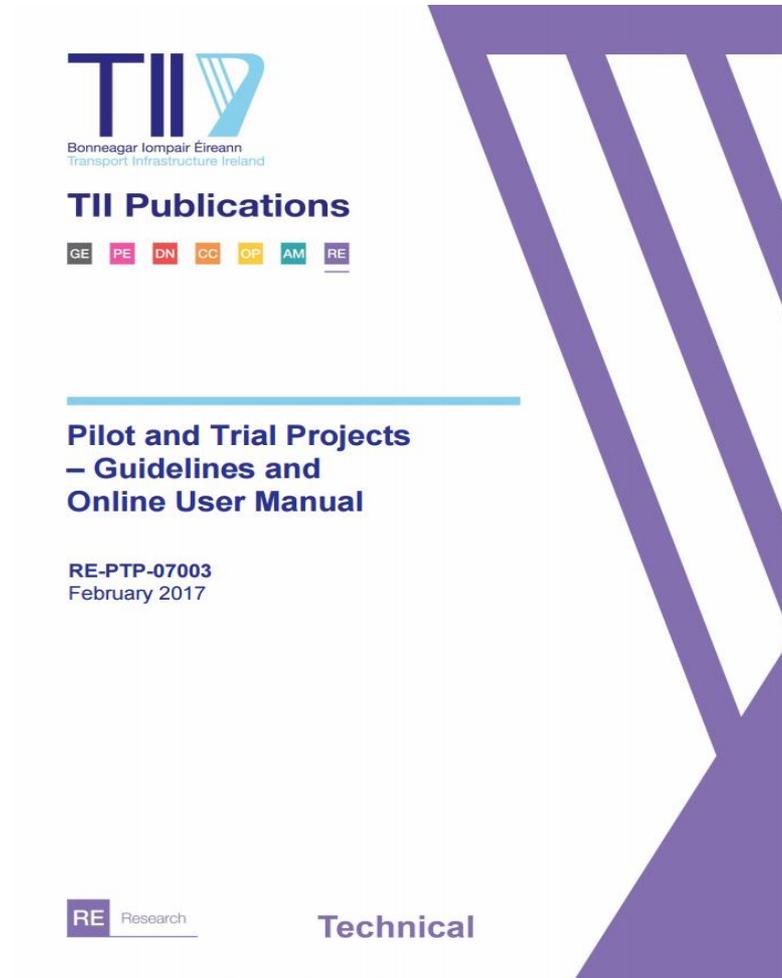
Needs and aims of the system

Needs and aims of the system

- The need for the system was identified in 2013 when it was discovered that there were 34 pilot projects and 51 trial projects that were active or proposed. At the time there was no central database and no way to track the projects nor their outcomes.
- **The aims of the system are to:**
 - Inform the development of Standards and Technical Documents for TII Publications.
 - Update existing Standards and Technical Documents for TII Publications.
 - Inform policy changes.
 - Provide documentary evidence to facilitate approval of products or processes where CE marking does not apply.

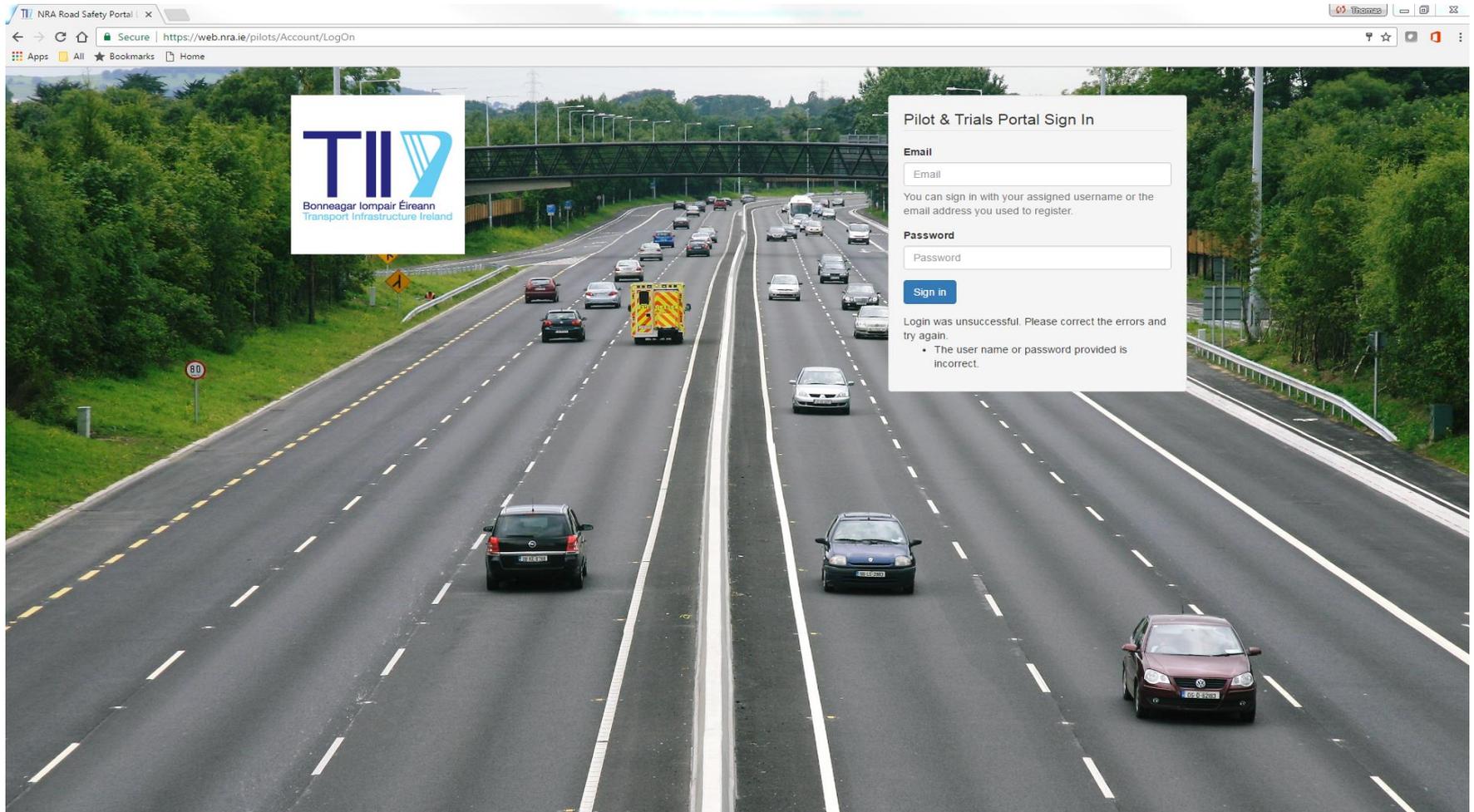
Accessing the guidelines and online user manual

Accessing the guidelines and online user manual



Accessing and using the system

Accessing and using the system



The image shows a web browser window displaying the TII Pilot & Trials Portal Sign In page. The browser's address bar shows the URL <https://web.nra.ie/pilots/Account/LogOn>. The page features a large background image of a multi-lane highway with several cars driving. On the left side of the highway, there is a large white box containing the TII logo and the text "Bonneagar Iompair Éireann Transport Infrastructure Ireland". On the right side, there is a white box titled "Pilot & Trials Portal Sign In" containing a sign-in form. The form has two input fields: "Email" and "Password". Below the "Password" field is a blue "Sign in" button. Below the button, there is a message: "Login was unsuccessful. Please correct the errors and try again." followed by a bulleted list: "• The user name or password provided is incorrect."

TII
Bonneagar Iompair Éireann
Transport Infrastructure Ireland

Pilot & Trials Portal Sign In

Email

You can sign in with your assigned username or the email address you used to register.

Password

[Sign in](#)

Login was unsuccessful. Please correct the errors and try again.

- The user name or password provided is incorrect.



Overview of the process and steps to be taken

Overview of the process and steps to be taken

- The Pilots and Trials website comprises four stages of data entry:
 - Step A (Assessment) is the first step of the project, intended to assess suitability and approval in principle. Basic project details are recorded and a unique Pilot and Trial Project (PT) reference number is assigned.

Step A (Assessment)
Assess Suitability & Approval in
Principal. Project detail & PT
reference no. is assigned

Overview of the process and steps to be taken

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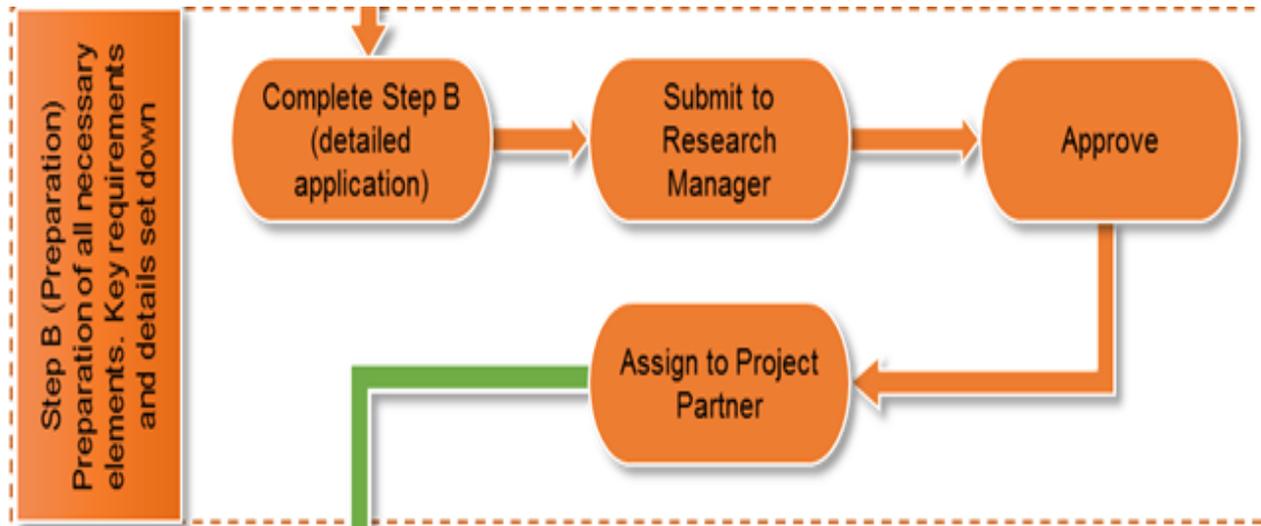
Overview of the process and steps to be taken

- Step B (Preparation) is focused on the preparation of all necessary elements to ensure the project is set-up appropriately. Key project requirements and details are set-down together with objective measures of performance.

Step B (Preparation)
Preparation of all necessary
elements. Key requirements
and details set down

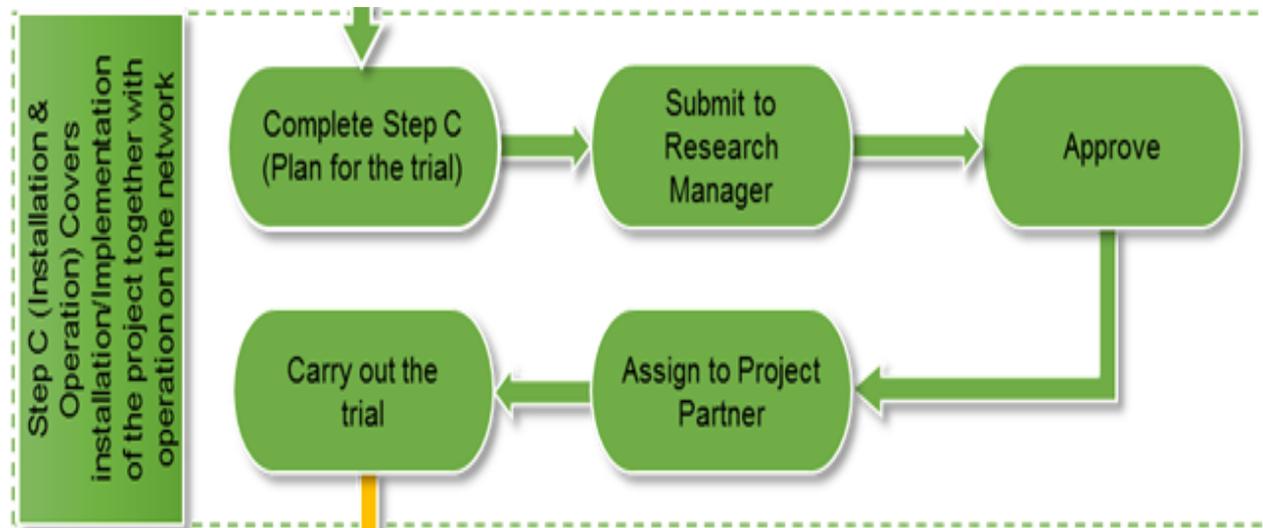
Overview of the process and steps to be taken

- Step B (Preparation) is focused on the preparation of all necessary elements to ensure the project is set-up appropriately. Key project requirements and details are set-down together with objective measures of performance.



Overview of the process and steps to be taken

- Step C (Installation and Operation) covers the installation/implementation of the project, together with the operation of the project on the network. All relevant details regarding site conditions, installation works, testing, etc. are recorded here, together with ongoing monitoring and final monitoring details.



Overview of the process and steps to be taken

- Step C (Installation and Operation) covers the installation/implementation of the project, together with the operation of the project on the network. All relevant details regarding site conditions, installation works, testing, etc. are recorded here, together with ongoing monitoring and final monitoring details.

Step C (Installation & Operation) Covers installation/Implementation of the project together with operation on the network

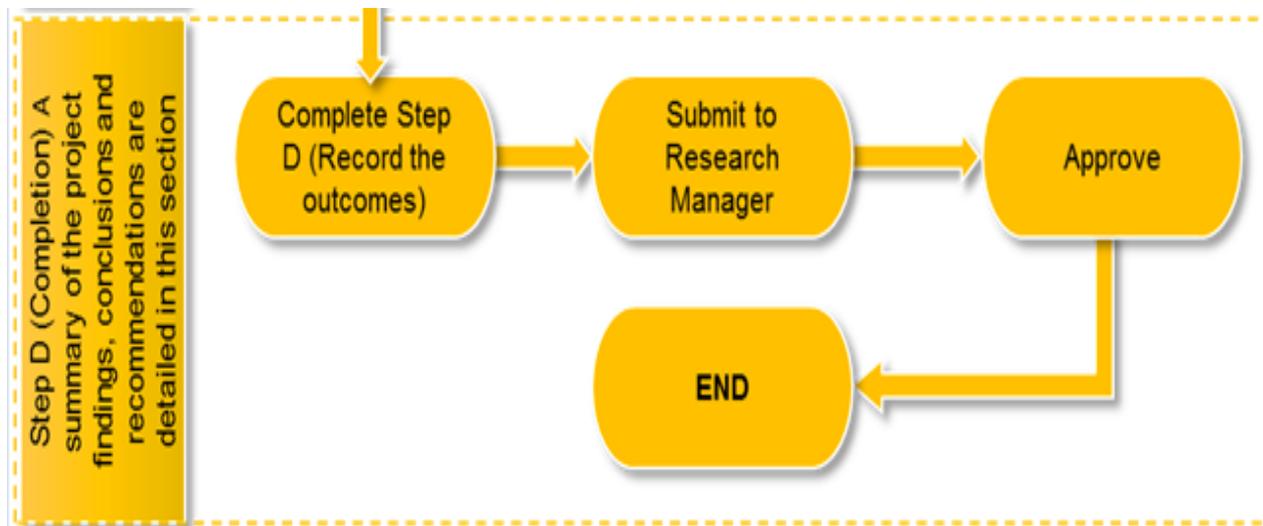
Overview of the process and steps to be taken

- Step D (Completion) is the final step of the project, where completion is confirmed. A summary of the project findings, together with conclusions and recommendations are recorded.

Step D (Completion) A summary of the project findings, conclusions and recommendations are detailed in this section

Overview of the process and steps to be taken

- Step D (Completion) is the final step of the project, where completion is confirmed. A summary of the project findings, together with conclusions and recommendations are recorded.



Overview of the approval process

- Following the completion of each step an application for approval must be submitted to the Research Manager. (Each step can only be submitted by the Project Leader).
- In reviewing the application the Research Manager can either:
 - Approve the application allowing it to proceed to the next Step.
 - Request further information from the applicant.
 - Refuse the application.

Role of the Project Leader

Role of the Project Leader

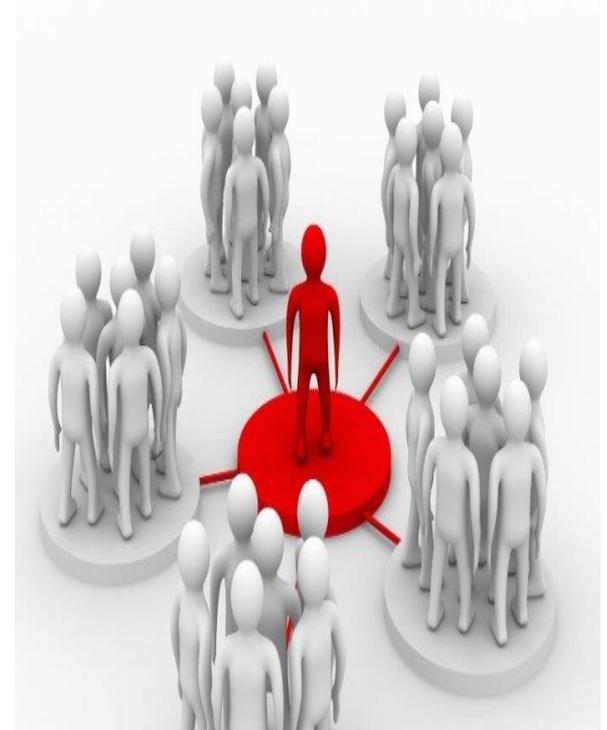
The Project Leader is the TII staff member leading the pilot or trial.

- Initiates the project.
- Provides information, where available, to set down the aims, objectives and user needs to be addressed by the project.
- Identifies any anticipated outcomes on current standards.
- Provides a sound justification for carrying out the project.
- Records background information to show that the project builds on previous experience and that any alternative options to the project are identified and assessed.
- Sets out the project programme, requirement for support personnel and the total GROSS project cost.
- Determines the form of agreement and procurement.



Role of the Project Leader

- Selects the project participants.
- Indicates which parties to the project are carrying the key risks.
- Indicates any guarantee, warranty, license, or the like to cover liability in the absence of a form of agreement.
- Undertakes and documents preliminary risk assessments.
- Determines suitable sites for the implementation of the pilot or trial.
- Identifies the need for a safety audit.
- Consults relevant stakeholders for projects on the rail network.
- Assigns the project to a project partner where applicable.



Role of the Project Partner

Role of the Project Partner

- A Project Partner can be a TII staff member or third party (Service Provider, Local Authority, Contractor, Operator or Supplier/Manufacturer).
- Is assigned a project by the project leader following Step A approval.
- Directly involved in undertaking, installing or monitoring the pilot or trial.
- Progresses the project through each stage of data entry. (The project leader is required to submit for approval at the end of each stage).



Example Pilot and Trial Projects



Example Pilot Project – Step A (Assessment)

[View Print Version](#)

[Step A](#) [Step B](#) [Step C](#) [Step D](#)

Assessment - Input Form (Step A)

Project Introduction

A.1 Project Basics



Project Status

Step B

A.1.1 Project ID:	NRA-PT-000047
A.1.2 Project Category:	Pilot
A.1.3 Project Title:	The use of transverse road markings as a speed reduction measure on motorway ramps and freeflow loops.
A.1.4 Brief Description of Project:	The aim of this pilot scheme is to investigate the effectiveness of transverse road markings as a means of controlling vehicle speeds on motorway ramps and freeflow loops, particularly where vehicles are transitioning from a high speed environment (such as the motorway mainline).
A.1.5 Discipline / Area of interest:	Signs and Road Markings
A.1.6 Project Leader Name:	Kevin O Rourke
Project Leader Section:	Network Operations
Project Leader Email:	korourke@nra.ie

A.2 Aims & Objectives



A.2.1 General:	To reduce collisions and improve road safety for vehicles using the motorway network.
A.2.2 Specific:	To determine whether the introduction of transverse road markings will be a effective factor in the reduction of speed related collisions.
A.2.3 User Needs:	There have been a number of single vehicle collisions on freeflow loops on the M50 in recent times. Data has been gathered in relation to the southbound freeflow loop from the M50 to the N3 showing 16 single vehicle collisions over an 11 month period.
A.2.4 Anticipated Outcome for the NRA DMRB and/or NRA MCDRW:	Possible change to the relevant NRA design standard for road markings at motorway freeflow loops and possibly at off ramps.
A.2.5 Other Anticipated Outcome:	Reduced collisions and improved road safety.

No File Attached This section does not have any attachments available for viewing.

Example Pilot Project – Step A (Assessment)

A.3 Project Justification

A.3.1 Statement on the Benefits of Project:

If successful, the project would reduce collisions which would enhance road safety. Also, as freeflow loops are generally a single lane cross section, collisions at these locations can cause a disproportionately high level of traffic disruption. It is expected that traffic disruption would therefore be significantly reduced by this project.

No File Attached This section does not have any attachments available for viewing.

Project Background

A.4 Project Relevant Previous Experience

A.4.1 Previous experience of the product in use:

No previous experience. Chapter 7 of the Traffic Signs Manual (November 2010) does permit the use of transverse road markings in certain circumstances on the approaches to roundabouts but the criteria listed therein would not include motorway freeflow loops.

A.4.2 Details of Other Known Products, Materials or Initiatives:

There has been an initiative for use of HGV activated warning signs in some locations on the M50. These however are limited to HGV in high winds.

A.4.3 Details of Previous Pilot or Trial Project(s):

none specific to this product however see A.4.2 above

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A.5 Project Alternatives or Options

A.5.1 Do Nothing Option:

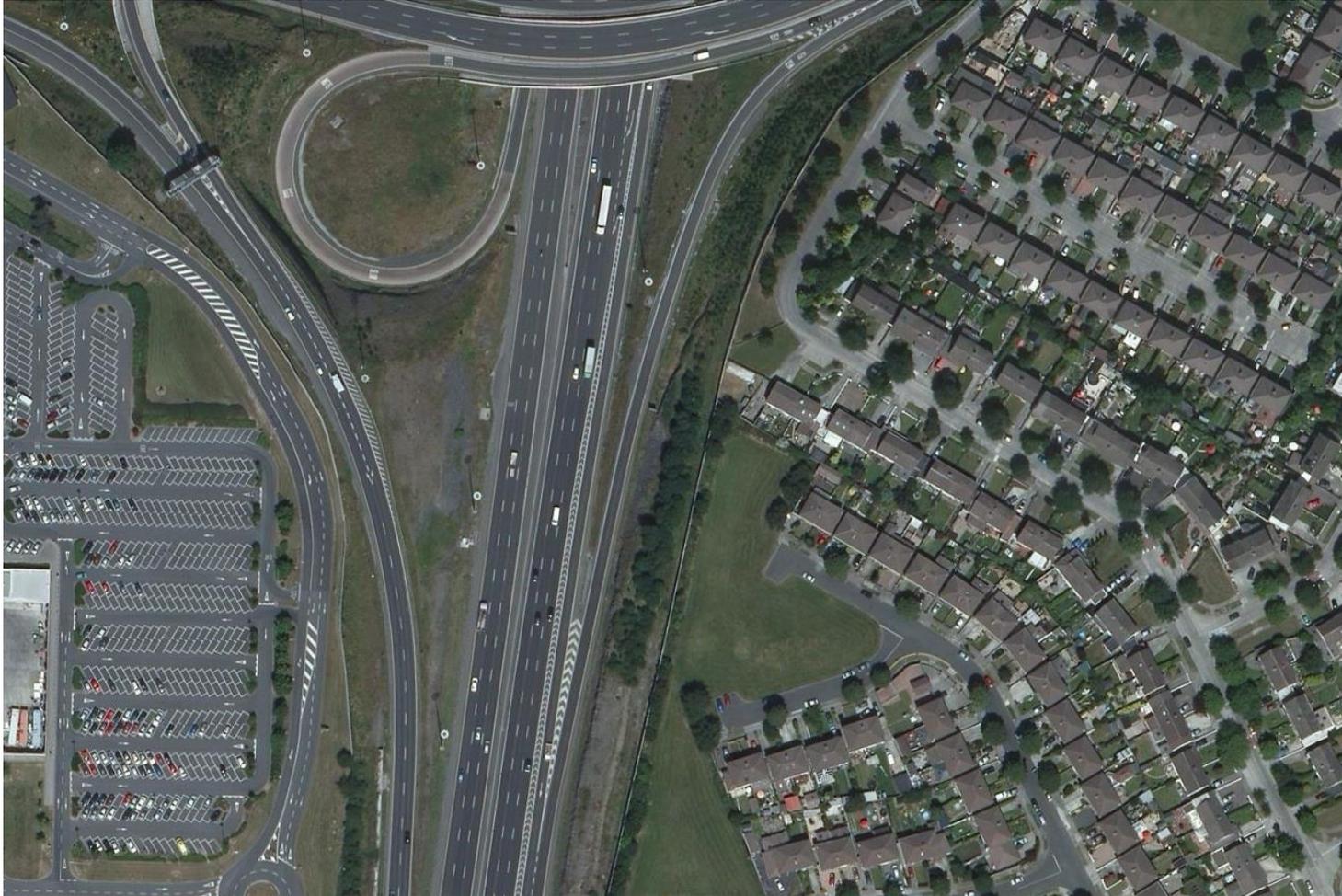
The consequences of doing nothing would be a risk of high levels of single vehicle collisions in certain locations.

A.5.2 Similar or Alternative Options:

"Automated flashing signs warning drivers to slow down are an alternative. There are some disadvantages of these such as:

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Example Pilot Project – Before



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Example Pilot Project – Step B (Preparation)

[View Print Version](#)

[Step A](#) **Step B** [Step C](#) [Step D](#)

Preparation - Input Form (Step B)

Project Requirements

B.1 Specific Technical Requirements - Design Stage

B.1.1 Design Stage Requirements (Yes/No):

Yes

B.1.2 Design Requirement 1:

A design is necessary for the layout and spacing of the road markings..test

B.1.3 Design Requirement 2:

B.1.4 Design Requirement 3:

No File Attached This section does not have any attachments available for viewing.

B.2 Specific Technical Requirements - Installation Stage

B.2.1 Installation Stage Requirements (Yes/No):

Yes

B.2.2 Installation Requirement 1:

The road markings are to be installed at the trial location.

B.2.3 Installation Requirement 2:

B.2.4 Installation Requirement 3:

No File Attached This section does not have any attachments available for viewing.

Example Pilot Project – Step B (Preparation)

B.3 Specific Technical Requirements - Monitoring Stage

B.3.1 Monitoring Stage Requirements (Yes/No): Yes

B.3.2 Monitoring Requirement 1: The frequency of single vehicle collisions is to be monitored over a period of time (6 months) after the installation of the trial.

B.3.3 Monitoring Requirement 2:

B.3.4 Monitoring Requirement 3:

No File Attached This section does not have any attachments available for viewing.

B.4 Specific Technical Requirements - Operation/Maintenance Stage

B.4.1 Operation/Maintenance Stage Requirements (Yes/No): No

B.4.2 Operation/Maintenance Requirement 1: There are no maintenance requirements anticipated within the lifespan of the trial. If adopted, the road markings will have the same normal maintenance requirements for all road markings i.e. periodic cleaning and cyclical replacement.

B.4.3 Operation/Maintenance Requirement 2:

B.4.4 Operation/Maintenance Requirement 3:

No File Attached This section does not have any attachments available for viewing.

B.5 Specific Technical Requirements - Special Requirements

B.5.1 Special Requirements (Yes/No): No

B.5.2 Special Requirement 1:

B.5.3 Special Requirement 2:

B.5.4 Special Requirement 3:

No File Attached This section does not have any attachments available for viewing.

Example Pilot Project – Step C (Installation & Operation)

[View Print Version](#)

[Step A](#) [Step B](#) **Step C** [Step D](#)

Installation & Operation - Input Form (Step C)

Pre-Installation Certification / Testing

C.1. Certification - Design

- C.1.1 Design Certification (Yes/No): No
- C.1.2 Design Certification - Element 1: Design certification is not applicable as the purpose of this trial is to develop the current design standard.
- C.1.3 Design Certification - Element 2:
- C.1.4 Design Certification - Element 3:

No File Attached This section does not have any attachments available for viewing.

C.2. Certification - Existing Site

- C.2.1 Existing Site Certification - Location 1: N/A
- C.2.2 Existing Site Certification - Location 2: N/A
- C.2.3 Existing Site Certification - Location 3: N/A

No File Attached This section does not have any attachments available for viewing.

Example Pilot Project – Step C (Installation & Operation)

C.3. Certification - Materials and Methods

C.3.1 Materials and Methods Certification / Testing (Yes/No): No

C.3.2 Materials and Methods Certification / Testing - Element 1: This trial involves the use of materials and application methods which are already well established, therefore no certification required.

C.3.3 Materials and Methods Certification / Testing - Element 2:

C.3.4 Materials and Methods Certification / Testing - Element 3:

No File Attached This section does not have any attachments available for viewing.

C.4. Certification - Equipment/Software

C.4.1 Equipment / Software Certification (Yes/No): No

C.4.2 Equipment / Software Certification - Element 1: This trial does not involve the use of any innovative equipment or software, therefore no certification required.

C.4.3 Equipment / Software Certification - Element 2:

C.4.4 Equipment / Software Certification - Element 3:

No File Attached This section does not have any attachments available for viewing.

Example Pilot Project – Step D (Completion)

[View Print Version](#)

[Step A](#) [Step B](#) [Step C](#) **Step D**

Completion - Input Form (Step D)

Conclusions

D.1. Performance Outcomes

D.1.1 Outcome of Performance Measures (IPMs) (IPMs) (Yes/No): Yes

D.1.2 IPM 1 and Outcome:

D.1.3 IPM 2 and Outcome:

D.1.4 IPM 3 and Outcome:

No File Attached This section does not have any attachments available for viewing.

D.2. Conclusions Commentary

D.2.1 Outcome of Project: Almost at an end

D.2.2 Final Programme:

D.2.3 Final Cost:

D.2.4 Other Summary Comments:

No File Attached This section does not have any attachments available for viewing.

Example Pilot Project –Step D (Completion)

Lessons Learnt

D.3. Step A (Assessment) Issues

D.3.1 Step A Lessons Learnt (Yes/No): Yes

D.3.2 Step A Lessons Learnt 1:

D.3.3 Step A Lessons Learnt 2:

D.3.4 Step A Lessons Learnt 3:

No File Attached This section does not have any attachments available for viewing.

D.4. Step B (Preparation) Issues

D.4.1 Step B Lessons Learnt (Yes/No): Yes

D.4.2 Step B Lessons Learnt 1:

D.4.3 Step B Lessons Learnt 2:

D.4.4 Step B Lessons Learnt 3:

No File Attached This section does not have any attachments available for viewing.

D.5. Step C (Installation & Operation) Issues

D.5.1 Step C Lessons Learnt (Yes/No): Yes

D.5.2 Step C Lessons Learnt 1:

D.5.3 Step C Lessons Learnt 2:

D.5.4 Step C Lessons Learnt 3:

No File Attached This section does not have any attachments available for viewing.

Example Pilot Project – After



Imagery ©2017 Google, Map Data ©2017 Google

Theoretical Trial Project



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- Low profile rumble strips.
- 500mm long x 100mm wide x 15mm high.
- Can be installed with masonry fixings or glued using a suitable adhesive.

Contact Information

- Please send any queries relating to Pilot or Trial Projects to:

infoPT@tii.ie

- Marked for the attention of the Research Manager

Questions & Answers

Thomas Connell (Arup)