# Transport Infrastructure Product Evaluation Scheme (TIPES)



## Introduction

The Transport Infrastructure Product Evaluation Scheme (TIPES) was originally developed by the Queensland Department of Transport and Main Roads. Several other road agencies have operated their own type approval schemes for particular applications.

ARRB took over administration of the TIPES process with the objective to develop a single national product evaluation scheme, thus reducing the need for separate evaluations of an applicant's product for multiple agencies.

Internationally, there are various examples of successful national technical assessment schemes for road construction products. Such schemes provide road agencies with objective assessments of product performance, while providing the proponents (companies with innovative products and new technologies) with a mechanism to gain market acceptance.

The pilot for a national scheme being administered by ARRB commenced in October 2013. This scheme initially began with road construction products. Lately ARRB has been considering expansion of the scheme to other areas of product evaluation in particular road traffic devices and intelligent transport systems.

Considerable work has been initiated by ARRB in terms of developing decision support guidelines and processes to form a part of the TIPES scheme.

With TIPES we will establish a national process for the evaluation of innovative products and new technology for all agencies to use.

## What is TIPES?

TIPES is a process that provides an independent fit-for-purpose assessment of innovative road products and new technologies. Products that fall outside the scope of established standards and specifications can be tested, trialled and proven to be reliable and safe.

TIPES is a safe and reliable point of reference as well as a standardisation of processes administered by one independent body.

## Who is using TIPES?

TIPES is a national scheme that has been endorsed by all Australian state and territory road agencies. It has also gained support from the Queensland Local Roads Alliance, Western Australian Local Government Association (WALGA) and IPWEA QLD.

## How can TIPES help you?

#### As a road agency

- One-stop-shop for creating consistency for all.
- Alleviates uncertainty when using new technologies.
- Helps create a pool of approved products for the road industry to use.
- Lessons from past trials across local government and state road agencies can be captured and shared nationally.

#### As a proponent of an innovative product

- You will have a nationally recognised process to substantiate your claims.
- It provides reliable and technically sound information for potential customers to consider.
- One assessment for all agencies, rather than having to satisfy multiple assessments in a range of different jurisdictions.
- It will help identify competitors with false claims and provide support for your better proven product.

## How TIPES works

#### **Technical assessment process**

There are three separate phases in the assessment process, with a hold point at the end of each phase. Work on each successive stage will not proceed beyond the hold point without written confirmation from the product evaluation panel and the applicant.

During the assessment should there be the need to modify the system defined by the Applicant (for example as a result of failure of the system to meet the requirements) the content of the assessment and additional work required shall be reconsidered by ARRB.



#### **Phase 1: Application**

- 1. Proponent submits supporting information including:
  - intended use of product
  - claimed performance of product
  - quality assurance documentation
  - past performance data (track record)
  - materials safety data sheet
- Submitted information is assessed by ARRB.
- Proponent advised whether submitted information is sufficient for product to advance to initial assessment stage.



#### Phase 2: Initial assessment

- 1. Panel of experts appointed (will include road agency representatives).
- 2. Laboratory test program formulated.
- 3. Perform laboratory tests.
- 4. Panel evaluates laboratory results and decides on product advancement to field validation stage.
- 5. Depending on the track record of the product and quality of supporting data, interim registration may be considered at this point.

The product evaluation panel determines if the proposed trial site is suitable to commence Phase 3.



### Phase 3: Field performance trial

- 1. Panel sets requirements for field performance trial (e.g. appropriate traffic conditions and geometry).
- Proponent negotiates construction of trial with road agency.
- 3. Performance monitored over period of time.



# Phase 4: Technical opinion on the performance of the product is prepared.

- 1. Once the assessment process is complete, panel of experts prepares technical opinion.
- 2. If outcome is favourable, technical opinion is included in public register.
- 3. Proponent is provided with certificate of registration.



## For more information

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