



# **THE SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED**

## **ROAD SAFETY AUDIT GUIDELINE**

February 2019

**CHIEF EXECUTIVE OFFICER**

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## 1. Introduction

A Road Safety Audit is a proactive road safety tool with proven international success. As a responsible Road Authority, SANRAL does not have to wait for the accumulation of serious injury and fatal crashes before positive steps can be taken to reduce such risk. Furthermore, SANRAL has a leading role to play in developing capacity and inculcating a road safety culture among all those who have a stake in developing our road environment. Road Safety Audits play a significant role in ensuring that we provide a road environment that is forgiving, self-explaining and provides for the needs of all road users.

### (a) Current Road Safety Audit Capacity Challenges

Road Safety Audits may be conducted at all stages of the life cycle of a project. However, given current Road Safety Auditor capacity constraints in the industry, SANRAL must endeavour to introduce Road Safety Audits at specific stages of specific projects which will provide the highest road safety return, for such investment. SANRAL together with its partners must endeavour to develop Road Safety Auditor capacity, through the initiation and promotion of recognised and accredited Road Safety Audit courses, and the creation of opportunities to gain appropriate road safety audit experience.

### (b) Objective of this Road Safety Audit Policy

This SANRAL Road Safety Audit Policy therefore identifies the type and stages of SANRAL projects on for which Road Safety Audits should be conducted, the size of the Road Safety Audit Team, the minimum requirements of the Road safety Audit Team Leader and Members, the roles and responsibilities of the Road Safety Audit Team, as well as that of the Engineering Services Provider (Main Consultant appointed by SANRAL), who shall appoint the independent Road Safety Audit Team.

SANRAL was party of the Road Traffic Management Corporation (RTMC) technical team that developed the ***South African Road Safety Audit Manual, (Version May 2012)***. SANRAL has therefore adopted this manual as the official guidance in conducting Road Safety Audits on SANRAL projects. A copy of the latest version of this manual is available on the SANRAL and the RTMC's website. It is important that SANRAL Project Managers read and understand how Road Safety Audits are conducted, from inception to final implementation of recommendations, in terms of this Manual.

## 2. Which SANRAL Projects will undergo Road Safety Audits?

All **New Facilities** and **Upgrading** (Strengthening and Improvement) Road Projects shall undergo Road Safety Audits at specified stages. For the purposes of this policy, New Road Projects, refer to Greenfields and New Facilities. Upgrading Projects include Strengthening and Improvement Projects. Strengthening Projects include, Rehabilitation, Reconstruction (including partial-reconstruction) and Bridges. Improvement Projects include improvements to Level of Service, Capacity, Alignment and bridges.

The following Stages of Road Safety Audits will be applied to the following project types:

Road Safety Audits	New Projects	Upgrading Projects	
		Strengthening (Rehabilitation, Reconstruction, Bridges)	Improvement (Level of Service, Capacity, Alignment, Bridges)
Stage 1: Feasibility / Preliminary Design (Conceptual)	X		
Stage 2: Preliminary Design /Draft Design	X	X	X
Stage 3: Detail Design (Including design of Traffic Management)	X	X	X
Stage 4: Construction (Traffic Management)	X(Optional)	X (Optional)	X (Optional)
Stage 5: Pre-opening	X(Optional)	X (Optional)	X (Optional)
<b>Total Number of Audits</b>	<b>Minimum of 3</b>	<b>Minimum of 2</b>	<b>Minimum of 2</b>

It is acknowledged that certain other project types may well warrant a Road Safety Audit for any one or more of its Stages. For example, certain Periodic Maintenance projects may well entail certain design improvements such as upgrade of signage or intersection layout improvements, which may warrant a Road Safety Audit specifically in Stages 2 and/or 3. **It is therefore important that the relevant Project Manager consult with the relevant Regional Road Safety Engineering Focus Group members to confirm whether a Road Safety Audit is to be performed on such project or not.** This consultation must happen at an early enough stage for the road safety audit to be included in Engineering Services procurement documentation.

### **3. Size and composition of Road Safety Audit Team**

The size of the Road Safety Audit Team will be dictated by the size, complexity and stage/s of the project to be Audited. Generally, the Road Safety Audit Team will comprise a Road Safety Audit Team Leader and at least two additional Audit Team Members. The Audit Team Leader is the lead Auditor that is responsible for compiling the Road Safety Audit Report and representing the Audit Team in engaging with Engineering Services Provider and SANRAL. The Audit Team Members assists and contributes to the Road Safety Audit.

In order to promote Road Safety Capacity Development, SANRAL may at its sole discretion allow an additional Road Safety Audit Team Member who is under the direct employ of Engineering Service Provider (Main Consultant), provided that such Road Safety Audit Member signs a declaration and undertaking that he/she is and will not be directly involved in stage of design of the same project to be Audited.

### **4. Minimum requirements of the Road Safety Audit Team Leader / Members**

The Road Safety Audit Team Leader must:

- Be a Registered Professional Engineer or Professional Engineering Technologist with the Engineering Council of South Africa (ECSA), or other international body recognized by SANRAL; and
- Must have at least 10 years of experience post-graduation in Road Safety and/or Traffic and Transportation Engineering and/or Geometric Design,
- Has successfully completed a recognized Road Safety Audit course to the equivalent of at least 5 CPD points,
- Has successfully completed a recognized Road Safety courses to the equivalent total of 2 CPD points within the last five (5) years, and
- Has undertaken at least 2 formal Road Safety Audits within a period of three (3) years as the Audit Team Leader or Audit Team member.
- The Road Safety Team Leader must be permanently employed by the Road Safety Audit Firm.

The Road Safety Audit Team Member must have:

- A diploma in technology or a Degree in Engineering or equivalent recognised qualification;
- At least 3 years of experience in Traffic and Transportation Engineering and/or Geometric Design and/or Road Safety Audits/Construction.
- Successfully completed a recognised Road Safety Audit Course to the equivalent of at least 5 CPD points.

The employer may make provision for additional Road Safety Team Members by allowing for financial provision in the Road Audit Quotation Document. The employer may target RSA Team Members that meet the above criteria, that are specifically employed by Emerging Micro

Enterprises (EMEs). This provision is in the interest of allowing further opportunity for EME RSA Team members to progress to RSA Team Leader.

Road Safety Audit Team Observer:

- Depending on the nature of the project, it may be advisable to have other stakeholders with local or specialised road safety experience on the team. Examples of these include Traffic Law Enforcement officials and School Representatives.

## **5. Role of the Engineering Service Provider (Main Consultant)**

- (a) The Engineering Service Provider must develop a Scope of Works for the Road Safety Audit Team. Such Scope of Works shall comprise but is not limited to the following:
  - Conduct a Project Information Review
  - Conduct Site Inspection/s
  - Produce Road Safety Audit Report/s
  - Issue the Road Safety Audit Report/s and discuss initial findings with Employer and
  - Initiate and Conduct a Completion Meeting
- (b) Recommend with motivation the Road Safety Audit Team composition.
- (c) Request quotations (or let a tender in terms of the Supply Chain Management) and recommend an independent Road Safety Audit Team to SANRAL.
- (d) Furthermore, the Engineering Services Provider shall:
  - i. Compile and Issue an Audit Brief to Audit Team.
  - ii. Initiate and conduct a Commencement Meeting with the Road Safety Audit Team.
  - iii. Attend a Completion Meeting if requested by the Employer.
  - iv. Review Road Safety Audit Findings and Recommendations.
  - v. Compile and Issue Response Report including Risk Assessment of Safety Concerns.
- (e) Implement Design Changes agreed to with Employer.
- (f) Provide written feedback on lessons learned and knowledge gained.

## 6. Road Safety Audit Close-out Procedure

It is important that SANRAL specify a proper close-out procedure to the Road Safety Audit process. The non-response by the Engineering Service Provider or SANRAL to the Road Safety Audit Findings, can have serious consequences.

Furthermore, it is important that the *Regional Road Safety Engineering Focus Group representatives* and the *Regional Road Safety Audit Coordinator* be informed regularly of:

- Road safety audits that had been done;
- Responses to the road safety audits in the respective region.

The following are the steps to be followed for Responding to a Road Safety Audit Report to ensure a proper close-out of the Road Safety Audit process.

### Step 1: Issue of Road Safety Audit Report

The Road Safety Audit Team Leader shall send a draft report to the Engineering Service Provider. The Audit Team Leader shall discuss the draft report with the Engineering Service Provider prior to formal submission. The purpose of this discussion is solely to ensure that the findings and recommendations are within the scope of the Audit, as defined in the audit brief. Once the Road Safety Audit Report is issued, it is a FINAL report – the report cannot be amended.

### Step 2: Completion Meeting

After receipt of the Final Road Safety Audit Report, the Engineering Service Provider must arrange for a Completion Meeting, attended by the SANRAL Project Manager, Road Safety Audit Team and the Engineering Service Provider (Design Team Leader)

The Completion Meeting provides the opportunity to better understand the approach by the Audit Team in assessing the safety performance of the project.

### Step 3: Response Report

After the Completion Meeting, the Engineering Service Provider will produce a **Road Safety Audit Response Report** for the SANRAL Project Manager, with recommendations on how each Road Safety Audit Finding will be responded to. It is important to note that Road Safety Audit Finding Recommendations are not mandatory, however due to the potential for litigation subsequent to a crash at an audited site, it is necessary that the audit findings and recommendations be given due consideration, and the reasons for not accepting the recommendations forthwith, or for adopting another solution or delaying the implementation of the recommendations be well documented in the **Road Safety Audit Response Report**.

Each finding in the Road Safety Audit Report can be dealt with by either:

- Accepting the problem and the proposed recommendation and initiating the remedial action;
- Accepting the problem in principle, but due to other constraints, implement changes that only go part of the way to resolve the safety problem, or implement a different solution than that recommended in the Audit Report;
- Not accepting the finding or recommendation at all.

In addition, it is important that the Engineering Service Provider on deciding and recommending to the SANRAL Project Manager the responses to the Road Safety Audit findings, conduct a thorough Risk Assessment in line with the procedure contained in Section 3.10.2, of the SARSAM May 2012.

**Step 4: SANRAL Project Manager Sign Off.**

The relevant SANRAL Project Manager must in writing formally, **Agree, Disagree** or **Amend** the Engineering Service Provider's Responses to the Road Safety Audit Findings, as contained in the **Road Safety Audit Response Report**.

The SANRAL Project Manager must instruct the Engineering Service Provider to implement such **Agreed, Disagreed** or **Amended** Recommendations.