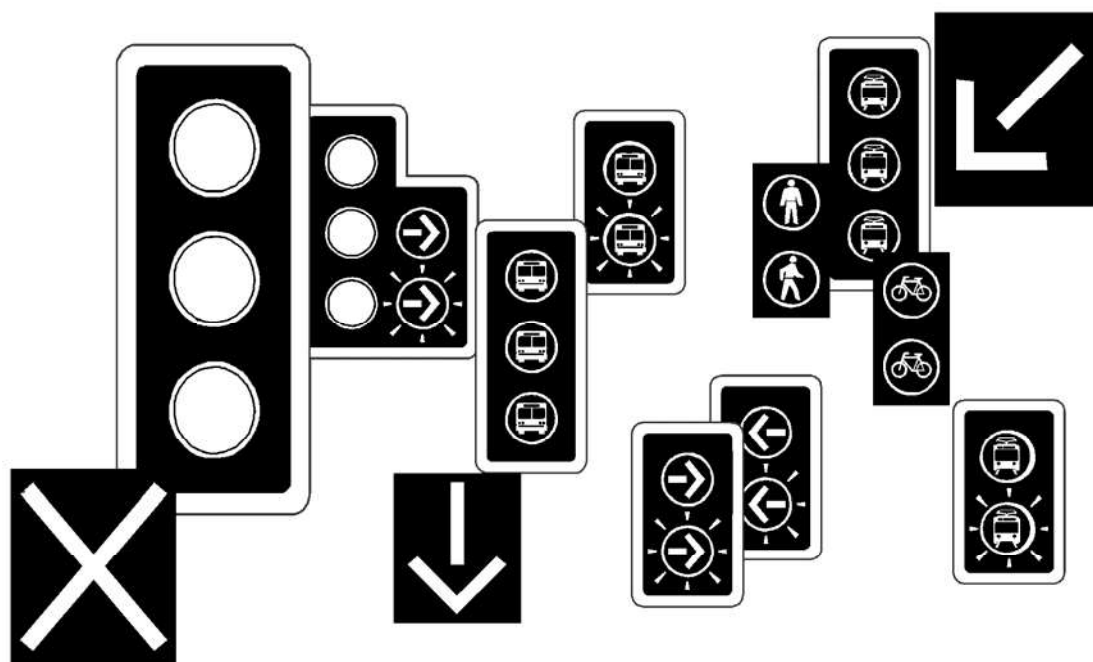


SOUTH AFRICAN ROAD TRAFFIC SIGNS MANUAL

VOLUME 3: TRAFFIC SIGNAL DESIGN

DIGITISED VERSION – May 2012

PART 3 TRAFFIC SIGNAL MANAGEMENT



CHAPTER 23: RESPONSIBILITIES AND DUTIES

23.1 INTRODUCTION

- 1 South African road authorities have powers and functions to provide and monitor roads and streets to promote mobility as well as economic development and to ensure efficient and safe operation of the road network. Traffic signals form an integral part of the transportation system and road network and are therefore the responsibility of the relevant road authority, or the designated authority to which the responsibility has been delegated.
- 2 A fundamental responsibility of a road authority is to ensure that traffic signal systems operate as efficiently and safely as possible. Traffic signals that are not properly installed, operated and maintained will severely affect traffic flow and could lead to an increase in traffic accidents.

23.2 INSTITUTIONAL RESPONSIBILITY

- 1 Road authorities in South Africa have permissive powers to maintain and repair roads and streets, although there is no specific obligation on an authority to undertake such duties. This, however, does not exempt a road authority, undertaking such duties, from the responsibility to ensure a safe road environment.
- 2 Traffic signals are specifically controlled by the National Road Traffic Regulations as well as the Road Traffic Signs Manual. Non-compliance to these regulations as well as the requirements contained in the manual can increase the risk of litigation in cases of loss of property, or injuries arising from accidents.
- 3 It is particularly important that standards and guidelines must be applied professionally and objectively, without undue influence by outside factors. Changes to standards that cannot objectively be quantified would increase the risk of litigation.
- 4 Road authorities should also introduce risk management programmes with the aim of reducing the possibility of litigation. Such programmes would encompass a variety of actions to ensure that standards are appropriately applied and to identify limitations in a system.
- 5 Road authorities also have the responsibility to ensure that traffic signal installation and maintenance are undertaken and controlled by professionals with appropriate levels of skills and knowledge. Failure to do so would be a failure of the duty of the authority.

23.3 INSTITUTIONAL CO-OPERATION

- 1 Traffic signal systems have become highly complex and intricate, requiring increasingly wider and more specialised skills of personnel involved with such systems. The complexity can be expected to evolve even more in the future, which will further increase the required skill levels. Such skill levels can more easily be provided when different road authorities co-operate institutionally, providing an integrated signalisation service.
- 2 In many cases, traffic signal operations can be expected to extend across several jurisdictions, which makes it imperative that different road authorities should co-operate in the field of traffic signalisation. The utility and efficiency of signals can be improved by integrating traffic signal systems.
- 3 **Co-operation is particularly important amongst smaller road authorities. Where road authorities control less than 200 traffic signal installations, it is strongly recommended that, where possible, such road authorities co-operate and fund a combined traffic signal division. Even larger road authorities should co-operate where it is possible to provide an integrated traffic signal system.**
- 4 High priority should be given by all road authorities to institutional co-operation. Such co-operation can easily be achieved, with a minimum of investigation and research.

23.4 SIGNAL MANAGEMENT

- 1 Communication within a road authority and with outside entities is an important management function. Good relations with the public are also essential, particularly when problems arise with traffic signalling.
- 2 Each authority should establish an ad-hoc traffic signal committee with the purpose of managing all aspects related to traffic signals, including applications or requests for new traffic signal installations.
- 3 The traffic signal committee should consist of the following members:
 - (a) Manager of the traffic signal division.
 - (b) Representatives of the traffic police.
 - (c) Representatives of road and transportation departments, particularly those involved with the planning and design of roads.
 - (d) Representatives of any other department that provide a service or who may be affected by traffic signals.
- 4 The traffic signal committee would be responsible for overseeing the traffic signal division and to ensure that traffic signals are installed and maintained with the highest level of proficiency and responsibility. The committee may also assist with funding and budget control.
- 5 **The committee should also review the geometric designs of all new road and junction proposals in order to ensure adequate provision is made for possible future signalisation.**

