CHAPTER 3. PRIORITIES

It is likely that the roads industry and road maintenance in particular will always be faced with budgetary constraints and strong competition from other sectors. As a result it is vitally important that maintenance is cost effective and that the work is prioritised in situations of limited funding.

The three major objectives of routine maintenance are to:

- provide a safe and acceptable level of service for the travelling public
- maintain the condition of the road such that maximum life is obtained from the road (asset preservation).
- ensure that the road environment is attractive (aesthetically pleasing).

Top priority is to keep the road safe at all times. Situations which may result in accidents or cause damage to vehicles should be handled first. Generally this will mean that a failed road surface will receive top priority. However, other situations such as damaged guardrail projecting into the carriageway, a slippery road surface due to spillage of some material, poor visibility due to smoke from a fire in or close to the road reserve, a deep slack that is dangerous at the prevailing speeds, the proximity of schools and the presence of pedestrians, all need to be assessed because of the risk to the travelling and general public.

Secondary issues such as smooth surfaces and rutting also pose a safety threat. Because these are often widespread the risks are less easy to quantify. Actions like surface texture correction or rutfilling over widespread areas fall into the category of periodic maintenance.

To prioritize other maintenance actions the question should be asked "will this action protect the pavement and prevent further deterioration?" Any situation where significant amounts of water can get into the pavement is critical and, if left unattended, will result in rapid deterioration of the pavement structure. Such situations could arise from subsurface seepage or springs (mainly in cuts or low lying areas), shallow side drains in flat grades and water ponding on the road surface or on the shoulders. Unfortunately these considerations cannot be assessed in isolation.

SANRAL’s PMS strategy regarding reseal and rehabilitation is critical. For example a road may have extensive pumping, crocodile cracks and rutting and is scheduled for rehabilitation within the next two years. Normally the riding quality under these circumstances is acceptable and, provided the cracking does not develop into extensive failures, a reasonable level of service will be possible with little or no maintenance action up to the time of rehabilitation. However, should SANRAL’s strategy be such that no periodic maintenance is anticipated for the next few years a different approach would be needed.
SANRAL should be informed that the particular section of road is in poor structural condition. If no changes can be made to the periodic maintenance programme certain interim holding measures could prevent severe deterioration of the pavement over few years. These holding measures could include actions to reduce the ingress of water such as a geofabric crackseal, roadpatch or a modified emulsion slurry depending on the extent of the problem.

Other maintenance actions such as litter removal, grass cutting, replacing signs and minor repairs on guardrails and fencing are not as important as the actions listed above. However each one should be judged on the circumstances of the contract. At a time of high fire risk grass cutting could substantially reduce such a risk. Guardrails in poor condition on a dangerous curve where accidents occur frequently hold an increased risk to traffic.

On certain routes frequent single vehicle accidents are attributed to driver fatigue. Clean, attractive, well-kept rest areas encourage the travelling public to break their journey. It can be argued that as part of a road safety campaign attention to rest areas should be considered before certain other actions particularly just before times of heavy traffic flows.