

---

# SIRIM STANDARD

---



**SIRIM 4:2014**

ICS: 03.220.20; 13.100

**Good practices in implementing  
commuting safety management**

## **SIRIM STANDARDS**

SIRIM Berhad is a premier total solutions provider in quality and technology innovations that helps industries and businesses to compete better through every step of the business value chain.

SIRIM Berhad is the centre of excellence in standardisation, facilitating industries and businesses in enhancing their production and competitiveness, protecting consumers' health and safety, and giving them the choice for quality products and services.

As a standards development organisation, SIRIM Berhad has extensive expertise in standards research and consultancy which helps industries and businesses to meet local and international requirements and practices, through the development of SIRIM Standards.

SIRIM Standards are developed according to SIRIM standardisation procedures, which are in line with international practices that ensure appropriate notification of work programmes and participation of interested parties. SIRIM Standards are developed through consensus by committees, which consist of experts in the subject matter. The use of SIRIM Standards is voluntary, and it is open for adoption by regulators, government agencies, associations, industries, professional bodies, etc.

For further information on SIRIM Standards, please contact Standards Research and Management Centre:

SIRIM Berhad  
(Company No. 367474 - V)  
1, Persiaran Dato' Menteri  
Section 2, P.O. Box 7035  
40700 Shah Alam  
Selangor Darul Ehsan  
MALAYSIA

Tel: 60 3 5544 6000  
Fax: 60 3 5544 6694  
Website: [www.sirim.my](http://www.sirim.my)

## **Contents**

	<b>Page</b>
Foreword.....	ii
0      Introduction.....	1
1      Scope .....	3
2      Terms and definitions .....	4
3      Factors affecting commuting accident.....	5
4      Commuting safety management performance measurement.....	7
5      Roles and responsibility.....	8
6      Recommendation on good practices for adoption .....	9
Annex A      Example of Route Hazard Mapping.....	24
Annex B      Example of Family Safety Reminder Card.....	25
Annex C      Daily vehicle inspection.....	26
Annex D      Example of car inspection checklist.....	27
Annex E      Example of motorcycle inspection checklist .....	30
Annex F      Relevant act, guidelines and/or programmes by authorities .....	32
Annex G      Example of detailed syllabus of defensive riding training.....	35
Annex H      Example of detailed syllabus of defensive driving training .....	37
Bibliography .....	38

## **Foreword**

The development of standard on good practices in implementing Commuting Safety Management was funded by Social Security Organisation of Malaysia (SOCSO).

This standard was developed by the Project Committee on Good Practices in Implementing Commuting Safety Management established by SIRIM Berhad.

This standard was developed with the objectives to:

- a) enhance awareness and knowledge on commuting safety management and road safety element in the Occupational Safety and Health Management System (OSHMS) at workplace;
- b) recommend good practices to employers on how to appropriately and effectively implement commuting safety management in order to minimise the risk of road crashes or minimise impact in the event of a road crash;
- c) promote awareness among employers and employees on safe riding and driving while commuting to work; and
- d) support the implementation of road traffic safety management based on MS ISO 39001:2013.

The recommended good practices outlined in this standard were derived based on the findings and results of a series of interviews with identified organisations from automotive, manufacturing, services, banking and insurance, electrical and electronic sectors on their practices of implementing commuting safety management.

This standard will be subjected to periodic review to reflect current needs and conditions. Users and other interested parties may submit comments on the contents of this standard for consideration in future versions.

Compliance to this standard does not by itself grant immunity from legal obligations.

## **Good practices in implementing commuting safety management**

### **0. Introduction**

#### **0.1 General**

The increasing number of commuting accidents in the country is alarming. As such, it is timely that proactive actions be taken by employers to educate their employees, their most valuable assets, on commuting safety management. Therefore, it is crucial for the employers to ensure the safe commuting of their employees to the workplace.

The employers are able to influence and inculcate road safety culture among their employees. They can also help to minimise commuting accidents through the provision of adequate and relevant training on road safety, use of safe vehicles and planning of safe journey. A systematic assessment also needs to be developed for assessing commuting accident prevention programmes and initiatives organised by employers to ensure the effectiveness of such programmes and initiatives.

There is also a need to emphasise for extensive commuting safety management outreach programmes for employers and employees. The employers need to be fully committed in building ‘safety first’ culture within the organisation, which will consequently promote prevention of commuting accidents among employees.

This standard prescribes good practices that can be adopted by organisations in Malaysia in managing their commuting safety management in a systematic and flexible approach while at the same time ensuring continuous improvement to their practices and systems. It highlights measures and initiatives that should be taken by employers to mitigate commuting risks to their employees.

#### **0.2 Concept of implementing good practices for commuting safety management**

This standard promotes the use of an iterative Plan-Do-Check-Act (PDCA) approach to guide organisations toward achieving maximum commuting safety management results (see Figure 1).

The good practices should be implemented according to the following PDCA cycle to ensure their effectiveness.

**Plan:** Top management demonstrates leadership and commitment through the establishment of objectives and targets or necessary processes to deliver results in accordance with the organisation's policy on commuting safety management.

## SIRIM 4:2014

**Do:** Implementing the commuting safety management as planned and ensures that sufficient capacity and resources are provided, and to ensure that the objectives and targets are met.

**Check:** Monitor and measure processes against policies, objectives and target, and report the results including identifying the opportunities for continual improvement.

**Act:** Take actions to continually improve process performance with the aim of reducing the incidence and risk of death and serious injuries in road crashes.

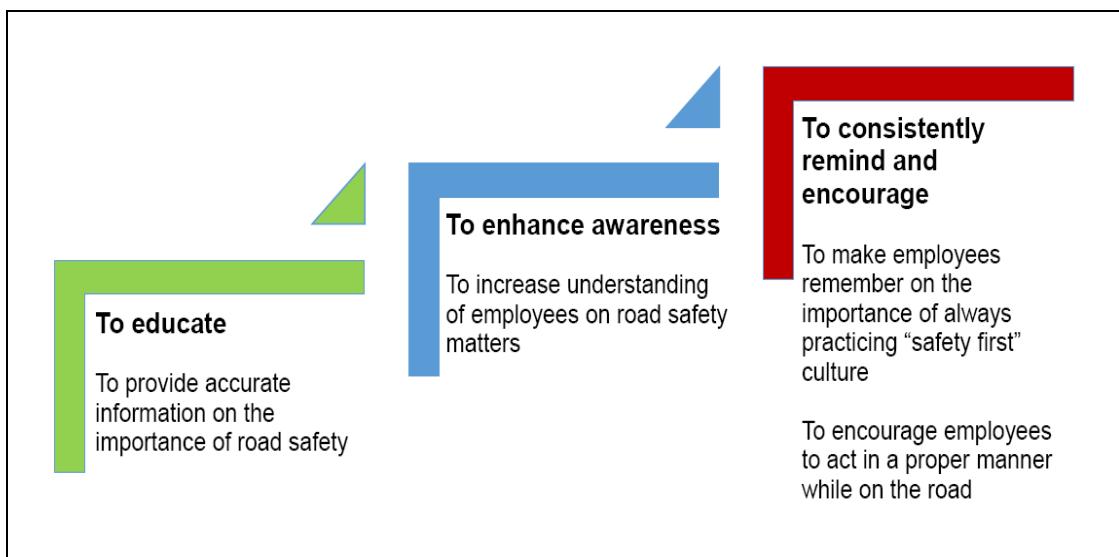


**Figure 1. PDCA approach to commuting safety management**

### 0.3 Implementation of good practices

The implementation of good practices for commuting safety management and road safety can be categorised into three levels; namely to educate, to enhance awareness and to consistently remind and encourage employees on the importance of always practicing ‘safety first’ culture (see Figure 2).

The implementation of continuous and sustainable road safety programmes and initiatives will positively affect the mindset and behaviour of employees. These programmes and initiatives should be conducted periodically, scheduled, and assessed to examine its adequacy and effectiveness, while opportunities for continual improvement should also be identified.



**Figure 2. Good practices on the implementation of road safety programmes/initiatives for commuting safety management**

## 1. Scope

This standard outlines good practices that can be adopted by organisations for the implementation of commuting safety management. These practices are intended to reduce number of fatalities and severity of injuries, and minimise damages to properties and economic loss due to road crashes.

The target users of this standard are employers as they have obligations to protect their employees through the adoption of a proactive approach to manage occupational road risks. This is also in line with the objective of the *Occupational Safety and Health Act (OSHA), 1994 (Act 514)* which requires employers to ensure the safety, health and welfare of all employees.

The good practices are also applicable for commercial vehicles including fleet operators. For commercial vehicles, it is a prerequisite for employers to ensure that they comply with the requirements of the *Occupational Safety and Health Industry Code of Practice for Road Transport Activities, 2010*.

## **2. Terms and definitions**

For the purposes of this standard, the terms and definitions given in MS 1722:2011, MS ISO 39001:2013 and the following apply.

### **2.1 commuting accident (CA)**

An accident happening to an employee shall be deemed to arise out of and in the course of his employment if the accident happens while the employee:

- a) is travelling on a route between his/her place of residence or stay and his/her place of work;
- b) is travelling on a journey made for any reason which is directly connected to his/her employment; or
- c) is travelling on a journey between his/her place of work and the place where he takes his meal during any authorised recess.

### **2.2 industrial accident (IA)**

A sudden and unforeseen event, attributable to any cause, which happens to a person, arising out of or in the cause of his work and resulting in an occupational injury to him/her.

### **2.3 near miss**

Any incident where no property was damaged and no personal injury sustained, but where, given a slight shift in time or position, damage and/or injury easily could have occurred.

### **3. Factors affecting commuting accident**

Three main factors that may contribute to commuting accidents are road users (i.e. driver, rider, bicyclist, and pedestrian), vehicles and, road and environment.

#### **3.1 Road users**

There are three elements that influence the physical and psychological conditions of road users:

a) Competency

The riding/driving knowledge and skill are essential for safe commuting. The riders/drivers should also have the ability to think positive and take prompt and appropriate actions to avoid road crash or minimise the impact of a road crash.

The riders/drivers should also understand the limitation of their vehicles to ensure they are appropriately ridden/driven.

b) Health and fitness

Health condition, fatigue, sleepiness, influence of alcohol and drug, visual problem (e.g. short- or long-sighted, astigmatism, glare, colour blindness), etc. are factors that could affect road safety.

Unstable state of emotion (e.g. angry, sad), stress, lack of motivation of road user, etc. are examples of psychological conditions that may cause commuting accidents. The road users should be in stable state of emotion before and throughout their journey.

c) Behaviour

The unsafe or inappropriate behaviour of road users such as the act of speeding, tailgating, weaving and red light running are major causes of road crashes.

The focus of road users may be distracted if they are eating, drinking, smoking, texting, answering or making calls, etc. while on the road.

#### **3.2 Vehicles**

Vehicle safety devices, suitability and condition are factors related to vehicle that may contribute to commuting accidents.

a) Safety features and devices

When deciding on purchasing of a vehicle, other than cost, the following factors should also be considered by the vehicle's owner:

## **SIRIM 4:2014**

- i) vehicle engineering, design and structure;
  - ii) passive and active safety devices (e.g. Electronic Stability Control (ESC), Anti-lock Braking System (ABS), Side Impact Protection System (SIPS) or seatbelt reminder system); and
  - iii) materials used for the vehicle.
- b) Suitability
- The selection of vehicle should fit and compatible with its purpose (e.g. a four-wheel drive should be used in the plantation rather than a small car).
- Any modification to the vehicle (e.g. for persons with disabilities (PWDs)) requires approval from the relevant authority to ensure its safety.
- c) Condition

Road users have to ensure their vehicles are constantly in good condition, road-worthy and comply with *Motor Vehicles (Construction and Use) Rules, 1959*. Comprehensive periodical vehicle maintenance is critical to ensure that the vehicle is functioning smoothly and has a long life expectancy.

### **3.3 Road and environment**

In addition to road users and vehicle factors, road and environment conditions are also considered as contributing factors to crashes. Hence, it is important for road users to focus on environmental factors such as road and topographical conditions and road category (e.g. highway, federal, state or municipal) throughout the entire commuting route.

The potential hazards and risks along the route should be identified so that appropriate actions and extra care can be taken when commuting. Attention should be given to:

- a) Road condition:
  - road surface (e.g. potholes, slippery, greasy);
  - topographical condition (e.g. terrain, flat, curve, winding); and
  - road construction work.
- b) Road furniture along the route (e.g. type of guardrail used, road signages, road markings).

c) Road environment:

- signage (e.g. inadequate, confusing or blocked road signages);
- lighting;
- haze;
- thick fog;
- weather condition (e.g. heavy rain, flood, landslide, crosswind);
- animal crossing; and
- illegally parked vehicles.

d) Traffic volume (e.g. during peak hours, festive seasons).

#### **4. Commuting safety management performance measurement**

In order to ensure the effectiveness of the commuting safety management, the management should monitor the road safety performance of their organisation. The monitoring can be divided into two categories, i.e. leading/proactive, and lagging/reactive indicators.

Examples of these indicators are as follows, but not limited to:

a) Leading/proactive indicators:

- number of route being mapped (including identification of illegal shortcut);
- number of campaign organised;
- number of training conducted; and
- number of vehicles inspection conducted.

b) Lagging/reactive indicators:

- number of employees and employer involve in road traffic injuries per year;
- number of employees and employer involve in road traffic fatality per year;
- number of employees and employer involve in road traffic crashes per year;

## **SIRIM 4:2014**

- number of employees and employer involve in near miss per year;
- number of loss time injuries related to road traffic crashes per year; and
- number of employees and employer return to work after involve in road traffic crashes per year.

## **5. Roles and responsibility**

### **5.1 Employer**

The employer's leadership and commitment are the key pillars for the success of commuting safety management programmes and initiatives in the workplace. This success is directly related to the employer's knowledge of safety and health at work, their attitude, vision and mission, and their willingness to allocate resources for safety and health of the employees.

The employer particularly the top management need to understand the importance of commuting safety management which is part of their main tasks. The top management should be knowledgeable in the total concept of occupational safety and health and able to monitor related activities that are carried out within the organisation including the assessment of its achievement and effectiveness.

The employer also needs to identify relevant road authorities that are responsible for roads connected to their premise for them to make the necessary reporting for any road damages or unsafe condition.

### **5.2 Employees**

The responsibility of the employees in commuting safety management is as important as the employer. The employees should provide adequate support and cooperation in all programmes and initiatives organised by the employer to ensure the success of such programmes and initiatives. The employees should also provide feedback and ideas for the improvement of the commuting safety management programmes and initiatives.

The employees are responsible to take reasonable care for the safety and health of themselves and other persons who may be affected by their act.

### **5.3 Government agencies and stakeholders**

Road safety is a shared responsibility among stakeholders. The government agencies, private sectors and non-profit organisations (NGO) should play a more proactive role in promoting road safety including participating in commuting safety management programmes.

The government and other relevant agencies should support and collaborate with the employer to reduce commuting accidents. The involvement and co-operation of these agencies will further encourage employers to organise programmes and initiatives that are necessary to ensure the safety and health of the employees while commuting.

The government and other relevant agencies should also take proactive actions and provide prompt response to concerns raised by employers or public concerning road safety.

The government and stakeholders should continuously disseminate information on road safety campaign and awareness through advertisements on mass media. A continuous and sustainable road safety promotion will positively affect the mindset and behaviour of public.

## **6. Recommendation on good practices for adoption**

### **6.1 General**

Subclauses 6.2 and 6.3 provide the lists of good practices, which are recommended for the implementation of an effective commuting safety management of an organisation. These practices have been implemented in some organisations and in a way have contributed in reducing and preventing commuting accidents, which could also be adopted by other organisations in Malaysia.

The recommended good practices are categorised into two categories as follows:

#### **6.1.1 Basic good practices**

Basic good practices are generic good practices that are applicable for most organisations and situations regardless of the type and nature of their service or scope of activities. The basic good practices are the minimum practices that are generally required for the effective implementation of commuting safety management. Some of these practices do not require huge amount of investment and resources but managed to get buy-in and support from employees of the organisations that have implemented such practices.

#### **6.1.2 Additional initiatives**

Additional initiatives can be implemented based on the organisation's needs and resources. Nevertheless, these additional initiatives are encouraged to be implemented by employers to complement the recommended programmes/initiatives listed in subclause 6.2. The implementation of these additional initiatives will provide value added benefits to organisations.

## 6.2 Basic good practices

No	Basic recommendation programmes/initiatives	Responsibility
1.	<p><b>Commitment to incorporate commuting safety management in OSH Policy</b></p> <p>The safety of employees as they commute to and from work is of significant importance and requires commitment and support from the top management of an organisation.</p> <p>The commuting safety management should be incorporated in the OSH Policy. It should be communicated and made readily accessible to all employees. In addition, the OSH policy should also be constantly reviewed and updated in-line with latest development such as changes in situation and regulations.</p> <p>The top management is responsible to:</p> <ul style="list-style-type: none"> <li>- provide leadership;</li> <li>- appoint road safety representative;</li> <li>- establish a clear, comprehensive and practicable set of road safety objectives and target; and</li> <li>- allocate resources (staff and financial support).</li> </ul>	Employer
2.	<p><b>Commuting accident reporting and internal investigation including near misses incident</b></p> <p>Commuting accident reporting and investigation consist of notification, internal investigation and report writing. All crashes including near misses should be notified to the employer at the soonest possible after the incident.</p> <p>All cases should be internally investigated by a dedicated team (e.g. safety and health committee (SHC)) to determine the causes, which could be used as lesson learnt to prevent similar incidents in future.</p> <p>A standard report format detailing the following need to be used for reporting to the management:</p> <ul style="list-style-type: none"> <li>- background of the commuting accident;</li> <li>- data on the crashes (e.g. condition of the road user, vehicles involved, road environment);</li> <li>- root cause analysis (possible causes); and</li> <li>- counter measures (action plan or guidance to prevent the crash).</li> </ul>	Employer and employees

No	Basic recommendation programmes/initiatives	Responsibility
	<p>Recommendations for preventing such similar crashes and reminders on road safety should be disseminated to all employees as part of awareness and lesson learnt.</p> <p>NOTE. The employer needs to separate the statistics of commuting accidents from industrial accidents when reporting to the Department of Occupational Safety and Health Malaysia.</p>	
3.	<p><b>Journey and risk management</b></p> <p>Employees need to plan their journey to ensure safe commuting.</p> <p>Route Hazard Mapping should be carried out to identify hazard and risk control measures. In addition, time management should also be implemented.</p> <p><b>a) Route Hazard Mapping</b></p> <p>Employees should conduct Route Hazard Mapping for their commuting routes.</p> <p>In carrying out Route Hazard Mapping the following aspects should be included:</p> <ul style="list-style-type: none"> <li>- consider the safest route to commute to work (including identification of illegal shortcut that could lead to a crash);</li> <li>- declare any hazard or problems along the commuting route;</li> <li>- propose respective prevention actions; and</li> <li>- periodically be updated when there are changes to the route (e.g. move to new house or new road development)</li> </ul> <p>The employer should guide and supervise the employees on how to anticipate potential hazard. See Annex A for example of a Route Hazard Mapping.</p> <p>The employer is responsible to provide information on accident-prone locations nearby their premise by posting them on the notice board in the organisation as reminder (e.g. in front of guardhouse, main entrance of each division).</p>	Employer and employees

## SIRIM 4:2014

No	Basic recommendation programmes/initiatives	Responsibility
	<p><b>b) Time management</b></p> <p>Employees should consider the following when choosing the route and timing to depart:</p> <ul style="list-style-type: none"> <li>- avoid peak hours and traffic congestion;</li> <li>- weather condition (e.g. raining, extreme hot weather);</li> <li>- road and topographical condition;</li> <li>- category of road (e.g. highway, federal, state or municipal); and</li> <li>- opt for the safest mode of transport.</li> </ul> <p>Commuting schedules should be adjusted and adapted to ensure compliance with speed limits and working hours.</p>	Employer and employees
4.	<p><b>Family Safety Reminder</b></p> <p>Employer is encouraged to introduce a Family Safety Reminder for every employee which is one of the 'hearts and minds' approaches. This reminder should be displayed at the employees' workstations or to be carried with them at all times.</p> <p>The application of 'hearts and minds' approach is used as a way to improve the culture of safety in organisations. The purpose of this approach is to change peoples' attitudes and habits so that they are extra cautious on safety. It provides practical techniques, which could remind employees to stop unsafe behaviour on road, as the thought of their family will encourage them to drive safely.</p> <p>Examples of Family Safety Reminder are Family Safety Reminder Card, short video on messages from family and key chain.</p> <p>The Family Safety Reminder Card could contain:</p> <ul style="list-style-type: none"> <li>- a photo of the family;</li> <li>- information on blood type; and</li> <li>- emergency contact number (e.g. next of kin).</li> </ul> <p>See Annex B for an example of the Family Safety Reminder Card.</p>	Employer and employees

No	Basic recommendation programmes/initiatives	Responsibility
5.	<p><b>Vehicle inspection</b></p> <p>The employer should provide programmes to facilitate regular vehicle inspection activities.</p> <p>Employees should have a proactive attitude to ensure that their vehicles, at all time, are in good condition and functioning well. Vehicle inspection should be conducted daily and periodically to prevent crashes and related losses.</p> <p><b>a) Daily vehicle inspection</b></p> <p>Employees should conduct daily inspection on their own vehicles before and after commuting to work. This will enable appropriate action or repairs be done to prevent mechanical failure of the vehicle. Items that need to be inspected include tyre, brake, lighting, etc.</p> <p>See Annex C for additional information on daily vehicle inspection</p> <p><b>b) Periodic vehicle inspection</b></p> <p>The employer should organise the periodic vehicle inspection programme for all employees to ensure that vehicles are 'fit for the task' and are insured, serviced and well maintained.</p> <p>During vehicle inspection, employer with participation of their employees should check the validity of employees' driving license and the vehicle road tax.</p> <p>Basic vehicle inspection activity should be conducted by the vehicle owner, which may be done together with the SHC based on a standard checklist which include:</p> <ul style="list-style-type: none"> <li>- wiper inspection;</li> <li>- brake lights;</li> <li>- signal lights;</li> <li>- tyre inspection; and</li> <li>- hazard lights.</li> </ul> <p>The employer should provide appropriate and sufficient training to the employees before conducting the vehicle inspection and maintenance programme. Record on vehicles inspection, maintenance and repair should be documented and properly kept.</p>	Employer and employees

## SIRIM 4:2014

No	Basic recommendation programmes/initiatives	Responsibility
	See Annexes D and E for examples of periodic vehicle inspection checklist.	
6.	<p><b>Reward and demerit systems</b></p> <p>The introduction of reward and demerit systems within the organisation could inculcate safety-conscious behaviour among employees as it could change their attitudes, improve habits, and increase skills to build a 'safety first' culture.</p> <p><b>a) Reward</b></p> <p>The employees will be more enthusiastic and motivated if they are valued and appreciated by the organisation and the reward system is one of the means where employer could demonstrate their appreciation to employees.</p> <p>The reward system does not necessarily involve monetary incentives. It can be in various forms such as recognition, special privileges, etc., depending on the employer's creativity and initiatives.</p> <p>For example, the recognition for 'Best Employees as Safety Icon' is given to those who have shown good safety performance in their work (free from IA and CA, minimum number of medical leaves, good discipline, punctual, etc.). As an incentive, they may be given a certificate and gifts (e.g. motorcycle tyre, t-shirt, etc.). In addition, their photos can be displayed at the 'Wall of Fame' in order to motivate others.</p> <p><b>b) Demerit</b></p> <p>Employees who fail to abide by the rules should be penalised through various means such as disciplinary action, loss of certain benefits, etc.</p> <p>The form of penalty should commensurate with the committed offense. It should not be intended to be punitive but more of providing lesson and instruction to employees to be more cautious and responsible on the road.</p> <p>As an example, performance evaluation of the employees will be affected if they do not comply with the rules and regulations pertaining to road safety specified by the management such as exceeding maximum speed limit within the premise of the organisation, not wearing appropriate personal protective equipment (PPE) (e.g. helmets, safety vest, etc.) or using hand phone while driving/riding.</p>	Employer and employees

No	Basic recommendation programmes/initiatives	Responsibility
7.	<p><b>Health and fitness to ride/drive</b></p> <p>Programmes for monitoring the health and fitness of employees should be established in order to safeguard the well-being of all parties.</p> <p>The employer should periodically organise health and fitness programmes for their employees. They could provide guidance to their employees on maintaining health and fitness including physical alertness through the following:</p> <ul style="list-style-type: none"> <li>a) Encourage on the need to undergo regular medical check-up through: <ul style="list-style-type: none"> <li>- company medical benefit;</li> <li>- SOCSO health screening;</li> <li>- in-house medical screening programme; or</li> <li>- government health screening programme.</li> </ul> </li> <li>b) Conduct alcohol and drug screening test using breathalyser or urine test.</li> <li>c) Organise physical fitness programmes (e.g. aerobics, walkathon, etc.).</li> <li>d) Provide tips on maintaining health and alertness especially when driving (e.g. a manual on physical exercise when stopping for rest).</li> <li>e) Provide information and educate employees on methods to manage stress, tiredness and fatigue resulting from driving and work pressure.</li> </ul>	Employer and employees
8.	<p><b>Periodic campaign and awareness on road safety</b></p> <p>Road safety campaigns are essential to educate, enhance awareness and remind employees on the importance of constantly practicing a 'safety first' culture.</p> <p>It is important for the safety and health representatives to be well versed on the relevant act, guidelines and/or programmes imposed by authorised bodies (see Annex F).</p> <p>The SHC should plan and organise an annual programme related to the commuting accident prevention and road safety. This programme may include but not limited to the following activities:</p>	<ul style="list-style-type: none"> <li>- Employer and employees</li> <li>- Collaboration with government agencies and stakeholders</li> </ul>

## SIRIM 4:2014

No	Basic recommendation programmes/initiatives	Responsibility
	<ul style="list-style-type: none"> <li>a) road safety exhibition;</li> <li>b) dissemination of information and instructions regarding safety through bunting, poster, banner, notice board or billboard;</li> <li>c) distribution of flyer, pamphlet, badge, sticker, keychain or bulletin;</li> <li>d) road safety videos;</li> <li>e) contest, quiz or safety slogan on road safety;</li> <li>f) safety week/month with specific subject/focus on road safety;</li> <li>g) campaign prior to festive season or shutdown operation for long holidays;</li> <li>h) safety assembly such as morning briefing or Grand Tool Box Talk (GTBT);</li> <li>i) orientation programme which include activities and sharing of information on commuting accident prevention and road safety;</li> <li>j) road safety talk with invited speakers from relevant authorities on commuting accident prevention and road safety (e.g. JKJR, PDRM, JPJ, SPAD, DOSH, SOCSO and NIOSH);</li> <li>k) communication channels or medium such as suggestion box to enable employees to make complaints and suggestions on commuting safety management; and</li> <li>l) road safety campaign/advocacy programme (e.g. wearing appropriate PPE for motorcyclist, wearing safety seat belt, etc.).</li> </ul> <p>The detailed planning and schedules of the campaign and awareness programmes to be conducted should be properly laid out. The roles and responsibilities of the person in-charge (PIC) of the programme should be defined and communicated. Dissemination of information via electronic or printed media should be intriguing and attractive.</p>	<ul style="list-style-type: none"> <li>- Employer and employees</li> <li>- Collaboration with government agencies and stakeholders</li> </ul>

No	Basic recommendation programmes/initiatives	Responsibility
9.	<p><b>Training</b></p> <p>Training on road safety to employees should be conducted periodically and continuously to improve their skills. The rider and driver's skills, training, experience and attitudes are fundamental to safe commuting. The trainings include:</p> <p><b>a) Defensive riding/driving</b></p> <p>The defensive riding/driving training should be provided to all employees who commute to work, regardless of whether it is their own vehicle or company owned vehicle.</p> <p>The syllabus for defensive riding/driving training should:</p> <ul style="list-style-type: none"> <li>- focus on hazard recognition and risk assessment as well as vehicle control skills;</li> <li>- include the importance of understanding the vulnerability of motorcyclists and to be alert and cautious of them when driving, especially if the motorcyclist is at blind spots;</li> <li>- educate the participants regarding the importance of proper fastening of safety helmet and seatbelt, and usage of protective clothing (e.g. safety vest, safety shoes, gloves, etc.);</li> <li>- emphasise and encourage the employees to do reverse parking in order to avoid accident to pedestrian and other road users during emergency;</li> <li>- include stress and anger management; and</li> <li>- include understanding of road signages.</li> </ul> <p>See Annexes G and H for example of detailed syllabus of defensive riding and driving trainings.</p> <p>The defensive riding training should include a commentary riding session when needed.</p> <p>During the commentary riding session, the trainer will:</p> <ul style="list-style-type: none"> <li>- observe participant practicing the defensive riding skill, which he has learnt, on the route that he uses for commuting to and from work; and</li> <li>- alert and re-brief the participant if he made any mistake and instruct him to ride again until the ride is perfect.</li> </ul>	<ul style="list-style-type: none"> <li>- Employer and employees</li> <li>- Collaboration with government agencies and stakeholders</li> </ul>

## SIRIM 4:2014

No	Basic recommendation programmes/initiatives	Responsibility
	<p><b>b) Train The Trainer (TTT) programme</b></p> <p>The employer should train their own employees to be the trainers in order to ensure the continuity of the training programmes and to retain expertise within the organisation.</p> <p>Training should be conducted by those who are competent and qualified to ensure the quality and the effectiveness of the training.</p> <p>The new trainers to be trained should be selected from among the best trainees of the previous trainings (from various departments).</p>	<ul style="list-style-type: none"> <li>- Employer and employees</li> <li>- Collaboration with government agencies and stakeholders</li> </ul>
10.	<p><b>Engagement with government and stakeholders</b></p> <p>Employer should look into any opportunities for engagement or collaboration with government and stakeholders in managing commuting accident.</p> <p>Private sectors, NGOs, and society at large should also play a more proactive role in promoting road safety in collaboration with relevant authorities (e.g. JKJR, PDRM, SPAD, MIROS, and JPJ).</p> <p>These engagements or collaborations may include but not limited to the following:</p> <p>a) In designing new infrastructure, responsible authorities should:</p> <ul style="list-style-type: none"> <li>- ensure that new roads are built safe without possible hazards;</li> <li>- identify road hierarchy according to the functions of the roads; and</li> <li>- create safe, attractive and convenient routes for pedestrians or cyclists and safer provision for crossing roads.</li> </ul> <p>b) Establish an integrated and efficient complaints management with relevant authorities. The authorities need to be more proactive in providing support and co-operation concerning the maintenance and improvement of road facilities and utilities (e.g. repair of road condition/potholes, road lighting, install speed reducer, speed bump, divider, proper road signage etc.).</p>	<ul style="list-style-type: none"> <li>- Employer and employees</li> <li>- Collaboration with government agencies and stakeholders</li> </ul>

No	Basic recommendation programmes/initiatives	Responsibility
	c) The employer could also benefit from 'linking' with other agencies' systems (e.g. PLUS, Integrated Transport Information System, Malaysian Meteorological Department, etc.). This will enable the display of real-time information about traffic flow, crashes, road works, weather condition, etc. on the intranet or screens at the workplace, which may assist the employees to plan for their trip.	
11.	<p><b>Crash response plan</b></p> <p>Employer should identify and disseminate information to their employees on emergency services that are available to them, in case of commuting accident. These could include:</p> <ul style="list-style-type: none"> <li>- emergency phone number;</li> <li>- panel clinic/hospital care;</li> <li>- ambulance services; and</li> <li>- company's representative for any emergency.</li> </ul>	Employer
12.	<p><b>Commuting Accident Management Review</b></p> <p>The reporting and analysis on commuting accident should be incorporated as one of the items on the agenda of SHC meeting.</p> <p>The assessment and actions proposed for the continual improvement of commuting safety management should also be discussed during the SHC meeting to ensure its effectiveness.</p>	Employer

### 6.3 Additional initiatives

No	Additional recommendation programmes/initiatives	Responsibility
1.	<p><b>Organisational commuting profile</b></p> <p>The employer is recommended to establish an organisational commuting profile for each employee for the purpose of record keeping, risk management and monitoring.</p> <p>The organisational commuting profile should include but not limited to the following:</p> <ul style="list-style-type: none"> <li>- mode of transportation (e.g. car, motorcycle, bus, etc.);</li> </ul>	Employer and employees

## SIRIM 4:2014

No	Additional recommendation programmes/initiatives	Responsibility
	<ul style="list-style-type: none"> <li>- valid license and vehicle registration;</li> <li>- driving/riding experience;</li> <li>- record of driving/riding under the influence of alcohol/drug;</li> <li>- working hours;</li> <li>- distance travelled to workplace;</li> <li>- crashes or near misses record;</li> <li>- medical history; and</li> <li>- number of summons received.</li> </ul>	
2.	<p><b>Incentives for participation in commuting safety programmes and initiatives</b></p> <p>Incentives should be given to employees to assist and encourage their participation in the commuting safety management programmes and initiatives.</p> <p>Listed are some of the examples of incentives that employers could provide:</p> <p class="list-item-l1"><b>a) Allocation for motorcycle service or tyres replacement</b></p> <p>Each employee who rides a motorcycle to work may be given a certain allocation (e.g. RM 50 per year), which will assist him with the maintenance of his motorcycle or parts replacement.</p> <p class="list-item-l1"><b>b) Loan to purchase vehicle or for major maintenance</b></p> <p>The employer may provide loan to the employees who wish to purchase a vehicle to facilitate safer commuting or need to do major maintenance of their vehicle.</p> <p class="list-item-l1"><b>c) Service centre (internal or collaboration with external workshop)</b></p> <p>The employer may provide a service centre within their premises to repair or maintain the employees' vehicles at a cheaper price.</p> <p>The employer may also collaborate with external workshops for the employees to repair or maintain their vehicles at a discounted price. With this arrangement, the employer is able to ensure the spare parts provided are genuine and sold at a reasonable price.</p>	Employer and employees

No	Additional recommendation programmes/initiatives	Responsibility
	<p><b>d) Cafeteria service</b></p> <p>In order to reduce the potential commuting accident during breaks, the employer is encouraged to provide cafeteria service to employees. This will reduce unnecessary journeys for employees and help to reduce commuting accidents.</p> <p><b>e) Locker facility</b></p> <p>The employer is encouraged to provide locker facility for the employees. For example, employees to keep their helmet or safety vest.</p> <p><b>f) Incentive for carpooling or use of public transport</b></p> <p>The employer is encouraged to provide incentive to employees who carpool or those who choose to commute to work using public transport.</p>	
3.	<p><b>Additional benefits for employees</b></p> <p>Based on the needs of the organisation, the employer is encouraged to provide the following additional benefits should they have the capabilities to do so.</p> <p><b>a) Shuttle services to workplace</b></p> <p>The employer may consider providing their own alternative transportation or shuttle services, for example within their complex, compound or branches, or between train stations and the place of work. Shared shuttle buses are safer than individual vehicles as they reduce the exposure to commuting accident.</p> <p>For manufacturing sectors, transportation should be provided especially for the operators.</p> <p><b>b) Housing facility</b></p> <p>The employer should also provide accommodation for their employees such as hostel or quarters that is close to the workplace. This effort will reduce risk and exposure to the potential commuting accident.</p> <p><b>c) Safer mode of transportation for outstation work</b></p> <p>The employees should be given a choice to use public transport as an option for them to commute for outstation work. Train and flight could be one of the options as they are among the safest modes of transport.</p>	Employer

## SIRIM 4:2014

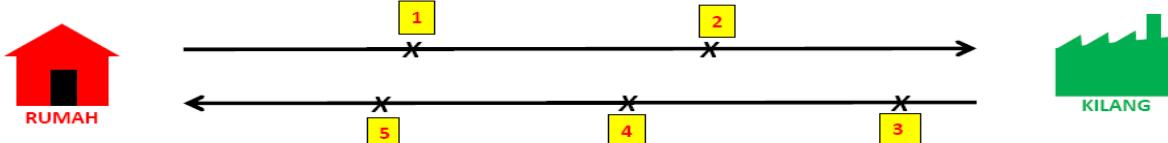
No	Additional recommendation programmes/initiatives	Responsibility
4.	<p><b>Alternative working arrangement</b></p> <p>The employer should consider implementing flexible working hours and work from home, if appropriate, as these arrangements could indirectly reduce the potential of commuting accident among the employees.</p> <p><b>a) Flexible working hours</b></p> <p>Flexible working hours provide an avenue for employees to plan their journey to work accordingly. For example, the employees can avoid the peak hours or they can carpool with family members or colleagues. However, flexible working hours may not be possible for those working in certain services and manufacturing sectors.</p> <p><b>b) 'Work from home' arrangement</b></p> <p>The employer could also consider implementing 'work from home' arrangement for employees. For example, employees are only required to come to the office one or two days a week. This subsequently reduces the need for daily commuting to work. Organisation that has this working arrangement needs to monitor its effectiveness and the productivity of the employees.</p>	Employer
5.	<p><b>Rest facilities</b></p> <p>The employer should consider providing conducive and sufficient rest and refresh facilities on-site. The employees should be encouraged to use such facilities so that they have sufficient rest before their journey home. Refreshment such as coffee and sweets may also be provided.</p> <p>The employer should also consider providing napping facilities, shower room or entertainment, etc., for employees working on shifts.</p>	Employer
6.	<p><b>Managing work shifts</b></p> <p>Employer who implements shift work system should ensure that the management of work schedule of individual employees follow the requirements of the labour law. Improper management of shift schedule may lead to reduced alertness and fatigue, which may affect work, safety and riding/driving performance.</p>	Employer

No	Additional recommendation programmes/initiatives	Responsibility
7.	<p><b>Community-based programmes (CBP) and corporate social responsibility (CSR)</b></p> <p>The employer is encouraged to conduct road safety programmes which involve participation of all employees and nearby communities.</p> <p>Examples of community-based programmes are safe riding advocacy, road hazard mapping near the workplace, etc.</p> <p>Examples of CSR activities organised by employers are Toyota Traffic Tots and Traffic Warden Programme, Honda Safety Programme at Kidzania, etc.</p>	<ul style="list-style-type: none"> <li>- Employer and employees</li> <li>- Collaboration with government agencies and stakeholders</li> <li>- Community within the workplace area</li> </ul>
8.	<p><b>Work assignment after commuting accident</b></p> <p>The employer should attend to the needs of the employee who had been involved in a commuting accident and should make some adjustment to the work assignment in view of his health condition. For example, to consider giving modified duty to employee who had been involved in commuting accident based on their injuries and recommendation from the authorised medical practitioner.</p> <p>The employer also needs to provide adequate facilities and accessibility for employees with disabilities (e.g. ramp, handrails, lifts, etc.)</p>	Employer

**Annex A**  
(informative)

**Example of Route Hazard Mapping**

[Source: Perusahaan Otomobil Nasional Sdn Bhd]

<p>NAMA : XXXXX          NO. STAFF : XXXXX          JABATAN : XXXXX          SEKSYEN/KUMPULAN : XXXXX          ALAMAT RUMAH : XXXXX          NO. TELEFON : 0X - XXXX XXXX (rumah)          NO. TELEFON (JIKA BERLAKU KECEMASAN) : 01X - XXX XXXX (suami)</p>	 <small>A Member of</small> <b>DRB-HICOM</b> 
<p><b>LALUAN DARI RUMAH KE TEMPAT KERJA (75 KM)</b></p> 	
<p>KETERANGAN - ( X ) KAWASAN BERISIKO KEMALANGAN :</p> <p>Nyatakan apa yang akan dilakukan apabila melalui kawasan risiko kemalangan</p> <p>Saya mesti berhati-hati dan senantiasa berwaspada pada tempat-tempat berikut;</p> <ol style="list-style-type: none"> <li>1. Simpang tiga di kawasan perumahan-KM 1&amp; 2 (ramai yang belok tidak memberikan signal utk masuk simpang)</li> <li>2. Simpang empat utama berhadapan Ocean Centre Point - KM 3 (banyak motorsikal yang masuk bila lampu masih merah)</li> <li>3. Sepanjang perjalanan lebih kurang <b>70KM</b> melalui lebuhraya PLUS (pastikan tidak melebihi had laju yg ditetapkan)</li> <li>4. Berhati-hati di lebuhraya terutamanya kereta yang memotong tanpa memberikan signal &amp; lori muatan besar</li> <li>5. Simpang di hadapan kilang PROTON - <b>KM74&amp;75</b> ketika membuat U-turn, ada kenderaan dari sebelah belakang yang memecut dan kenderaan masuk simpang utama ke Kilang PROTON</li> </ol>	

## Annex B (informative)

### Example of Family Safety Reminder Card

[Source: Perusahaan Otomobil Nasional Sdn Bhd]

	JABATAN : SHE (Safety, Health Environment) SEKSYEN/KUMPULAN: XXX NO. STAFF : XXX	
	<h4>PESANAN KELUARGA SAYA UNTUK SELAMAT</h4> <p><i>Ummi kena kerja dengan bersungguh-sungguh kerana Allah SWT dan jaga kesihatan &amp; keselamatan Ummi. Kami Sayang Ummi.....</i></p>	
<b>TIDAK MEMBAHAYAKAN DIRI SENDIRI</b> <p>Nyatakan apa yang akan dibuat untuk menjaga diri sendiri</p> <ul style="list-style-type: none"><li>• Kena menjaga disiplin diri dan ikut peraturan yang ditetapkan.</li><li>• Senantiasa peka dengan keadaan/hazard disekeliling</li><li>• Fikir sebelum melaksanakan sesuatu terutamanya kerja-kerja yang berisiko tinggi</li><li>• Berhati-hati dalam pekerjaan</li></ul>	<b>TIDAK MEMBAHAYAKAN ORANG LAIN</b> <p>Nyatakan apa yang akan dibuat untuk menjaga orang lain di tempat kerja</p> <ul style="list-style-type: none"><li>• Nasihatkan orang lain sekiranya membahayakan. "We care, we share"</li><li>• Laksanakan program-program keselamatan &amp; kesihatan yang boleh menimbulkan kesedaran kepada orang lain.</li><li>• Memastikan setiap tindakan saya TIDAK AKAN menimbulkan bahaya kepada orang lain.</li></ul>	

**Annex C**  
(informative)

**Daily vehicle inspection**

Tables C.1 and C.2 listed the basic daily inspection for car and motorcycle, respectively.

**Table C.1. Basic daily inspection for car**

[Based on: NIOSH Malaysia defensive driving training material]

<b>Item to inspect</b>	
P	= Petrol (fuel)
O	= Oil (lubricants, brake fluid, power steering fluid)
W	= Water (radiator and screen washer)
E	= Electrical items (lights, indicators, etc.)
R	= Rubber based items (tyre, wiper blades)

**Table C.2. Basic daily inspection for motorcycle**

[Based on: NIOSH Malaysia defensive riding training material]

<b>Item to inspect</b>	
T	= Tyre and wheels
C	= Controls
L	= Lights and switches
O	= Oil and fuel
C	= Chain and chassis
K	= Kick/side stand

**Annex D**  
(informative)

**Example of car inspection checklist**

Date:

No of vehicle:

Driver's name:

Car model:

Road tax (expiry date):

Mileage reading (during inspection):

Tick (✓) where appropriate.

**D.1 Weekly maintenance**

No	Items	Sufficient	Insufficient
1.	Radiator fluids/engine coolant		
2.	Battery water or dry battery		
3.	Tyre pressure		
4.	Lubricants		
5.	Brake fluids		
6.	Window washer		

**D.2 Monthly maintenance**

**D.2.1 Components**

No	Items	Yes*	No
1.	Spare tyre		
2.	Side mirror (left)		
3.	Side mirror (right)		
4.	Rear view mirror		

\* The components are available and functioning/in good condition.

## SIRIM 4:2014

### D.2.2 Lighting

No	Items	Yes*	No
1.	Front signal light (left)		
2.	Front signal light (right)		
3.	Rear signal light (left)		
4.	Rear signal light (right)		
5.	Front head light small (left)		
6.	Front head light small (right)		
7.	Front head light big (left)		
8.	Front head light big (right)		
9.	Rear light (left)		
10.	Rear light (right)		
11.	Brake light (left)		
12.	Brake light (right)		
13.	Third brake light		
14.	Reverse light (left)		
15.	Reverse light (right)		

\* The lightings are functioning/in good condition.

### D.2.3 Brake system

No	Items	Yes*	No
1.	Main brake		
2.	Hand/Foot brake		

\* The brake systems are functioning/in good condition.

### D.2.4 Accessories

No	Items	Yes*	No
1.	Jack		
2.	Tyres opener (tyre change kit)		
3.	First aids box		
4.	Triangular sign		
5.	Torch light		
6.	Tools kits		

\* The accessories are available and functioning/in good condition.

**D.2.5 When the engine start**

No	Items	Yes*	No
1.	Heat meters		
2.	Brake function		
3.	Air-cond function		
4.	Wiper function		
5.	Rainspouts function		
6.	Emergency (hazard) warning light function		

\* The items are functioning/in good condition.

**Annex E**  
(informative)**Example of motorcycle inspection checklist**

Date:

No of vehicle:

Driver's name:

Motorcycle model:

Road tax (expiry date):

Mileage reading (during inspection):

Tick (✓) where appropriate.

**E.1 Weekly maintenance**

No	Items	Sufficient	Insufficient
1.	Battery water or dry battery		
2.	Tyre pressure		
3.	Tyre tread		
4.	Lubricants		
5.	Brake fluids		
6.	Chain - adjustment (no twisting and bending) - not damage or rusty		
7.	Sprocket - wear and tear		

**E.2 Monthly maintenance****E.2.1 Components**

No	Items	Yes*	No
1.	Tyres opener (tyre change kit)		
2.	Torch light		
3.	Tools kits		
4.	Side mirror (left)		
5.	Side mirror (right)		

\* The components are available and functioning/in good condition.

### E.2.2 Lighting

No	Items	Yes*	No
1.	Front signal light (left)		
2.	Front signal light (right)		
3.	Rear signal light (left)		
4.	Rear signal light (right)		
5.	Front head light small		
6.	Front head light big		
7.	Rear light		
8.	Brake light		

\* The lightings are functioning/in good condition.

### E.2.3 Brake system

No	Items	Yes*	No
1.	Rear brake		
2.	Front brake		

\* The brake systems are functioning/in good condition.

### E.2.4 When the engine start

No	Items	Yes*	No
1.	Brake function		
2.	Emergency (hazard) warning light function		

\* The items are functioning/in good condition.

**Annex F**  
(informative)

**Relevant act, guidelines and/or programmes by authorities**

The employer, especially the person in-charge of safety and health should be well versed on the relevant act, guidelines and/or programmes imposed by authorised bodies. The information should be communicated to the employees for their knowledge and awareness on their rights as employees and road users. The following are the relevant act, guidelines, and/or programmes that are currently enforced/implemented relating to commuting safety management.

**a) *Occupational Safety and Health Act (OSHA) 1994 (Act 514)***

The *Occupational Safety and Health Act (OSHA) 1994 (Act 514)* provides the legislative framework to secure the safety, health and welfare among all Malaysian workforces and to protect others against risks to safety or health in relation with the activities of persons at work.

**b) *Road Transport Act 1987***

The *Road Transport Act 1987* makes provisions for the regulation of motor vehicles and traffic on roads and other matters with respect to roads and vehicles for the protection of third parties against risks arising out of the use of motor vehicle; the coordination and control of means of and facilities for transport; the coordination and control of means of and facilities for construction and adaptation of motor vehicles.

**c) *Employees' Social Security Act 1969***

*Employees' Social Security Act 1969* requires every industry to be registered with SOCSO within such time and in such manner as specified in Section 4 and all employees in these industries are required to be insured according to Section 5 of the regulations.

SOCSO is mandated to administer and enforce the *Employee Social Security Act 1969* and *Employee Social Security General Rules 1971*. Through the Act and Regulations, SOCSO is able to provide free medical treatment, prevention measure, facility for physical or vocational rehabilitation and financial assistance to employees if they have lost their abilities due to accident or diseases that have reduced their abilities to work or rendered them incapacitated. If an employee died, his dependants are provided for financially through pensions.

**d) *Occupational Safety and Health Master Plan for Malaysia 2015 (OSH-MP 15)***

OSH Master Plan 15 (OSH-MP 15) provides the action framework to complement OSHA 1994 legislative framework. The OSH-MP 15 which is intended to be implemented in 2015 will guide and direct the combined efforts to encourage organisations to give a higher priority to OSH and to boost the national OSH performance.

A well-structured and well-implemented OSH-MP 15 can also achieve a fast-track improvement of OSH standards in Malaysia. This will bring various benefits to key stakeholders, country social partners, the general community and the entire nation through increased efficiency, productivity and competitiveness in organisations due to better OSH, thereby resulting in a better quality of life for all.

The employers have a valuable and important role to play to complement the role of the government. They can successfully fulfil this role by proactively inculcating among employees the importance of good OSH practices and standards, and cultivating a preventive culture among the employees.

Meanwhile, the employees have the responsibility to co-operate with the employer, in any measure or strategy undertaken by them to ensure the safety and health of the working environment, which include commuting accident prevention programmes and initiatives.

**e) *Occupational Safety and Health Industry Code of Practice for Road Transport Activities, 2010 (iCOP)***

iCOP has been introduced as one of the road safety intervention programmes that guide road transportation sector (e.g. bus operators, commercial vehicles, etc.) in ensuring safety and health in their working environment. iCOP consists of five key elements: policy, organisation, planning and implementation, evaluation and action for continual improvement.

The iCOP is gazetted under sub-section 37 (4) of the *Occupational Safety and Health Act 1994 (Act 514)*.

**f) *Guidelines on Preventing and Responding to Drug and Alcohol in the workplace (JKKP: GP(1)02/2004)***

These guidelines provide the guidance for maintaining safe, healthy, and efficient working conditions for its employees. Therefore, the consumption of alcohol or illegal drugs by any employee during ‘duty hours’ is prohibited. Duty hours consist of all working hours, including break periods and on-call periods, whether on or off company premises. The consumption of alcohol or illegal drugs while performing company business or while in a company facility is prohibited.

**g) *Motor Vehicles (Safety Seat-Belt) Rules, 1978***

In Malaysia, the first stage of safety belt laws was implemented in 1978. This was expanded in January 2009 to include rear passengers. Passenger vehicles registered prior to January 1, 1995, and those weighing more than 3.5 tons are exempted from this rule. The third and fourth stages, which will deal with baby and child seats and the number of passengers in a vehicle, have not taken effect as required by the law, and no penalty imposed for violation of the law at the moment.

**h) *International Road Assessment Programme (iRAP)***

iRAP assesses roads all over the world and aims to significantly reduce road casualties by improving the safety of road infrastructure.

Malaysian Institute of Road Safety Research (MIROS) in collaboration with Australian Road Assessment Programme (AusRAP) conducted assessment programme for Malaysia's road. The study showed that road assessment is useful in developing countries. High-risk roads where large numbers of people were killed or seriously injured are inspected and affordable programmes on safety engineering are identified. As the percentage of road deaths involving vulnerable road users, like pedestrians and motorcyclists, is high in developing countries, iRAP focuses on measures to improve road design especially for these users.

**i) *New Car Assessment Programme for Southeast Asian Countries (ASEAN NCAP)***

ASEAN NCAP is targeted to elevate vehicle safety standards, raise consumer awareness and thus encourage a market for safer vehicles in the region. Thus, the need for safer vehicles will match the increased risk while on the road.

ASEAN NCAP is a collaborative effort between the Malaysian Institute of Road Safety Research (MIROS) and Global New Car Assessment Program (Global NCAP). Safety standards may vary in different parts of the world; thus, there is a need to evaluate cars' occupant protection based on NCAP requirement in the ASEAN region.

**Annex G**  
(informative)

**Example of detailed syllabus of defensive riding training**

(Source: Perusahaan Otomobil Nasional Sdn Bhd and NIOSH Malaysia)

**a) Act and the law**

- road safety plan in Malaysia
- crashes statistics
- costs of crashes
- crashes cause factors

**b) Introduction of motorcycles**

- types of motorcycles
- types of motorcycle license
- motorcycle parts
- inspection of motorcycle
- PPE and motorcycle accessories
- types of helmets

**c) Defensive riding and hazards on the road**

- preparation of mental and physical skills
- courteous, safe and defensive riding attitude
- journey management
- stress management
- violence on the road
- hazards on the road
- conditions and environment on the road

**d) Handling and control of motorcycle**

- body position while riding
- handling techniques and observations
- control techniques
- braking techniques and shift the burden
- cornering techniques
- techniques of cutting and changing lanes
- control techniques during slip

**e) Motorcycle maintenance**

- checklists

**f) Crashes management**

- first aid (aid to crashes victims)

## **SIRIM 4:2014**

### **g) Motorcycle theft**

- statistic and how to prevent theft

### **h) Practical training session**

**Annex H**  
(informative)

**Example of detailed syllabus of defensive driving training**

(Source: Perusahaan Otomobil Nasional Sdn Bhd and NIOSH Malaysia)

- a) Introduction and road laws
- b) Commuting accident
- c) Introduction to vehicle parts
- d) Safe and defensive driving (hazard identification on road)
- e) Vehicle handling and control
- f) Emergency management
- g) Practical training session

## **Bibliography**

- [1] MS 1722:2011, *Occupational safety and health (OSH) management systems - Requirements (First revision)*
- [2] MS ISO 39001:2013, *Road traffic safety (RTS) management systems - Requirements with guidance for use*
- [3] JKKP DP(S) 127/379/3-5, *Occupational Safety and Health Industry Code of Practice for Road Transport Activities*, 2010
- [4] MCP 1/2007, *Kod Amalan Keselamatan, Kesihatan dan Alam Sekitar untuk sektor pengangkutan*
- [5] *Employees' Social Security Act 1969 (Act 4)*
- [6] L.N 170/59, *Motor Vehicles (Construction and Use) Rules, 1959*
- [7] ETSC Report 4, 'PRAISE': Preventing Road Accidents and injuries for the Safety of Employees, November 2010

## Acknowledgements

SIRIM Berhad would like to express gratitude and appreciation to all those who had contributed their expertise, experience and time rendered throughout the development of this standard. A special thanks to Y.Bhg. Dato' Dr Mohammed Azman bin Dato' Aziz Mohammed, Deputy Chief Executive Operations of SOCSO who has put forward the idea on the need for a standard on commuting accident prevention, and for his continuous support in the development of the standard.

SIRIM Berhad would also like to thank the members of the Project Committee on Good Practices in Implementing Commuting Safety Management who have contributed their ideas, time and expertise in developing this standard.

Prof Dr Wong Shaw Voon (Chairman)	Malaysian Institute of Road Safety Research
Hajjah Maimunah Haji Khalid (Deputy Chairman)	Global Institute of Safety Management Sdn Bhd
Ms Salwa Denan (Technical Secretary)	SIRIM Berhad
Ms Ilhamah Othman/	Malaysian Institute of Road Safety Research
Ms Rabiahah Ilyas	National Institute of Occupational Safety and Health Malaysia
Mr Mohd Nazif Mohd Zaidan/	Perusahaan Otomobil Nasional Sdn Bhd
Mr Dinie Iqbal Minhat	SIRIM Berhad
Ms Norwani Ahmat/	SIRIM Berhad
Mr Mohd Rawi Omar	SIRIM Training Services Sdn Bhd
Ms Salmah Nordin/	SIRIM QAS International Sdn Bhd
Ms Nor Hashimah Ismail/	Social Security Organisation
Ms Nik Aida Azura Nik Md Salleh/	Universiti Putra Malaysia
Ms Zuraidah Baba/	
Ms Lee Hooi Lan/	
Ms Nur Zawani Abdol Raub	
Mr Abdul Razak Abu Bakar/	
Ms Hafidzah Ab Rahim/	
Mr Ali Maidin	
Mr Kamaruzaman Mohd Junos	
Mr Harun Bakar/	
Dr Azlan Darus/	
Mr Wan Mahmood Wan Harun/	
Mr Rashidi Ismail	
Dr Mohd Rafee Baharudin/	
Ms Nor Afida Miskam	



© Copyright 2014

All rights reserved. Unless otherwise specified, no part of this standard may be reproduced or utilised in any form or by any means, electronic or mechanical, including photocopying, recording or otherwise, without prior written permission from Social Security Organisation and SIRIM Berhad.