

**Report to World Health Organisation, Vietnam Country
Office**

**ISO 39001 Road Traffic Safety Management Systems:
Roadmap to implementation in Vietnam**

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Summary & Recommendations

Following successful promotion and awareness raising by WHO and the Vietnam Automobile Transportation Association in November 2013, Martin Small was engaged to provide further technical comment and advice on road traffic safety management systems and the preparation of a road map through which Vietnam could adopt and implement *ISO 39001 Road Traffic Safety Management Systems*.

ISO 39001 combines the quality management systems approach with the world's best knowledge of road traffic safety management. Road safety management is Pillar One of the Global Plan for the Decade of Action for Road Safety 2011-2020, and the plan specifically references the need to promote ISO 39001. Increasing regulatory attention is being given to safety management systems within the transportation sector in Vietnam, and ISO 39001 can be seen as the next stage for increasing road traffic safety assurance within the transportation industry.

As part of this work, the traffic safety assurance plan of a bus company was reviewed in consultation with the company and with the relevant provincial Transport Department. In summary, the company can demonstrate a commitment to traffic safety but this can be better reflected in its traffic safety assurance plan, further improvements to company processes appear achievable in the short term, and some gaps in how safety is currently being managed within the company need to be addressed.

There are several gaps between what can be expected from a safety management system, and what is required in current regulations. It is important that new mechanisms are established within the company to address these safety management issues. As these mechanisms are developed, it can be expected that a stronger safety culture will develop within the company and the risk of fatality and serious injury will continually reduce.

Vietnamese companies can become certified to ISO 39001 now, and larger companies within the transportation industry should be encouraged to do so. However, discussion with the Vietnam Standards and Quality Institute (TCVN) highlighted the longer-term value of developing a Vietnam Standard based on ISO 39001 – referred to now as Vietnam Standard for Road Traffic Safety Management Systems (VSRTSMS).

It is recommended that a 9 stage roadmap for adoption and implementation of ISO 39001 within Vietnam. Specifically, it is recommended that:

- WHO prepare a formal proposal to the Ministry of Transport (MoT) for the adoption and application of ISO 39001 within the Vietnam transportation industry
- WHO also forward its proposal to the National Traffic Safety Committee (NTSC) and the Vietnam Automobile Transportation Association (VATA), seeking their support for this initiative and endorsement of the proposal

- MoT formally request TCVN to include the development of VSRTSMS in their next annual plan (July 2015 – June 2016)
- TCVN simply adopt the original ISO 39001 text as VSRTSMS to ensure the strongest alignment with international best practice in road traffic safety management systems once implemented
- MoT consult with the VATA and relevant national authorities regarding the implementation of the VSRTSMS, and then promulgate regulations accordingly.

A shared responsibility approach should be taken to implementation of VSRTSMS, based on consultation with industry. Specifically, it is recommended that:

- the Ministry of Transport collaborate with the VATA and transportation companies to oversee implementation, learn and apply lessons as more transportation companies certify to VSRTSMS
- the Ministry of Transport requires all companies providing passenger and goods transportation services to certify their operations to VSRTSMS, with implementation staged over a five year period, starting with long haul passenger services.

Staged implementation is important to support the development of a supply of third party providers of audit and certification services. It will also allow lessons to be learned from earlier stages of the process and passed on as more transportation companies become certified to VSRTSMS.

ISO 39001 provides a strong opportunity for Vietnam to leverage its current attention to traffic safety assurance within the transportation industry. By assuming both a leadership role, and adopting a shared responsibility approach to implementation of VSRTSMS with VATA and other key stakeholders, the Ministry of Transport can build a stronger platform for sustained safety improvement in road traffic safety over the next decade.

Introduction

As part of the Bloomberg Philanthropies road safety program in Vietnam, the WHO Country Office engaged Martin Small Consulting in November 2013 to help promote safety management systems for the transportation industry. The primary activity was the delivery of two workshops – one for transportation policy makers, and the other for transportation companies – using *ISO 39001 Road Traffic Safety Management Systems* as the basis for this promotion.

The Vietnam Automobile Transportation Association gave active support to this work and concluded the workshops by encouraging the government, industry and WHO to work towards implementation of ISO 39001. Attachment 1 summarises some key considerations noted during this work for the application of ISO 39001 in Vietnam's transportation industry.

Martin Small was subsequently engaged to provide technical comment and advice, including a review of a road safety plan that had been developed by a transportation company, and the preparation of a road map through which Vietnam could adopt and implement ISO 39001. Meetings were held with a passenger transport company and the relevant provincial Transport Department, with the Vietnam Standards and Quality Institute, with the VATA, and with Mai Linh Group. A media interview was also conducted with the Vietnam News Agency.

Strengthening traffic safety assurance

ISO 39001 was published in late 2012, and combines the quality management systems approach with the world's best knowledge of road traffic safety management. The importance of road safety management to sustained reduction in road traffic injury has been increasingly recognised over the last 15 years. Road safety management is Pillar One of the Global Plan for the Decade of Action for Road Safety 2011-2020, and the plan specifically references the need to promote ISO 39001.

ISO 39001 is integrated with the “safe systems” approach to road safety, which is briefly summarised in Attachment 2. ISO 39001 has been developed to assist organisations to reduce and ultimately eliminate death and serious injury arising from use of the road network. It is relevant in many different organisational contexts – large, small, public, private, regulatory, commercial – throughout low, middle and high income countries.

Increasing regulatory attention is being given to management systems within the transportation sector in Vietnam. Minimum standards have been set for safety management and oversight by transportation companies themselves of vehicle, driver and journey safety issues. By addressing safety management at a company level, the legislation reinforces two critical aspects for the future of road safety in Vietnam – shared responsibility, and leadership.

The principle of shared responsibility is embodied in the safe system approach to road safety and emphasises the opportunity for many different organisations to make a significant contribution to road safety. This responsibility is not confined to the transportation industry, as many different types of organisations can make a significant contribution.¹ However, the transportation industry has a special obligation to reduce the safety risks associated with its activities, and the best way of discharging this responsibility is to put management systems in place which focus specifically on reducing this risk.

Leadership is a critical component to improving road safety and is required to begin developing a road traffic safety management system as referenced in ISO 39001.

¹ Organisational activity which has an impact on road traffic safety includes: employee use of the road traffic system, providing or commissioning passenger or freight transport services, generating road traffic, or providing road traffic services or products.

The top management of a transportation company plays a critical role in giving high priority to the safety of the company's operations, mandating the development and implementation of management systems to ensure the safety of those operations, and allocating the necessary human and financial resources to achieve the company's safety goals. Company certification to ISO 39001 requires the company to have set a safety goal of zero death and serious injury on the road.

Management systems and regulation

Transport regulation in high income countries has tended to begin with a focus on economic regulation, and then moved towards safety and then subsequently environmental regulation. Over time, economic regulation has been reduced, and safety regulation has moved increasingly towards management issues. These regulatory steps within Vietnam's transportation industry are likely to provide enduring safety value.

In a number of high income countries, the regulatory requirements for transportation companies are reduced for those companies which can demonstrate their compliance with or achievement of regulatory requirements in different ways. An example of this is the National Heavy Vehicle Accreditation Scheme (NHVAS) in Australia which has been available in the road freight transport industry since 1999. The NHVAS recognises operators who have robust systems in place to manage vehicle mass (weight), vehicle maintenance, and driver fatigue. By demonstrating their adherence to these management systems under the NHVAS, they can gain access to:

- increased mass (weight) limits for their freight operations
- waivers for annual certificate of vehicle inspection
- greater flexibility for when drivers work and rest.

This incentivised approach recognises the current state of management systems within the Australian transportation industry. At such an early stage of the introduction of safety management systems within the Vietnamese industry, such an approach may increase safety risks however, and ISO 39001 has been discussed as the next stage for increasing road traffic safety assurance within the transportation industry.

Potential benefits from ISO 39001 certification

The management system template provided by ISO 39001 includes activities which are required for any management system to be established, and which need to be considered when developing a road traffic safety management system. It also requires third party certification by a corporation recognised by national standards bodies as competent to audit the management system.

It should be noted that there are substantial potential benefits for a transportation company to certify its operations to ISO 39001. A major Australian report² showed that good road traffic safety management systems provide a range of direct business benefits, such as:

- reduced fatalities and serious injuries, and insurance premiums
- reduced fuel, maintenance, and other operating costs
- increased fleet life expectancy, and staff retention.

Third party certification also allows a company to more easily demonstrate its safety credentials, which provides reputational and brand benefits by associating the company with the enduring value of human safety within the community.

Traffic safety assurance in Vietnam's transportation industry

This section addresses the regulatory requirements for safety management in the transportation industry, how this has been implemented within a transportation company, and what traffic safety assurance improvements can be made within the company.

Article 5 of Circular 18 requires passenger and freight transportation companies to have operational units which develop and implement traffic safety assurance plans, as well as check the technical safety of vehicles being used, manage the vehicle's itinerary supervision devices, and promote traffic safety amongst staff. Appendices to Circular 18 set out traffic safety management procedures, and the following four elements of a traffic safety assurance plan:

- the establishment of a traffic safety assurance department within transport companies
- the development and implementation of a transport safety operational plan addressing vehicle safety, the operating schedule, and a labour plan
- a plan for traffic safety propaganda and education, and
- a monitoring and supervision regime addressing driver practices, itinerary supervision devices, and compliance with traffic safety laws.

The traffic safety assurance plan of a bus company was reviewed, and a meeting held with a company director and senior staff to learn more about how safety was being managed within the company. The purpose of this was to consider how the regulations are being implemented, and what improvements can be made to the company's plan. The purpose was not to check compliance with the law, which is the responsibility of the Transport Department. The company has a fleet of approximately 45 buses operating on three fixed routes, with nearly 250 trips per day. Some additional contract services are also provided.

² National Transport Commission (2011). *A Corporate Approach to Transport Safety Discussion Paper*. Melbourne: National Transport Commission.

The table below describes the regulatory requirements for traffic safety assurance, how that is addressed in the company’s plan, and what improvements can be made to the company’s plan.

Regulatory requirements	Company’s traffic safety assurance plan	Analysis
I. Establish traffic safety assurance department in transport companies		
<ul style="list-style-type: none"> • Organizing structure: model, department's functions and duties • Person in charge: name, qualification, major • Establishing traffic safety monitoring unit (only applied to companies doing business in passenger transport on fixed route, by bus, by taxi or cargo transport) 	<ul style="list-style-type: none"> • The company has established a Traffic Safety Committee to lead the company’s safety efforts • The company has also established a dedicated 3 person inspection unit which manages, operates and reports on journey surveillance devices, which is reflected in the plan 	<ul style="list-style-type: none"> • The results that the company are trying to achieve (particularly intermediate results such as breaches of company safety policies) need to be set and monitored by the Board, and reflected in the plan • The plan should reflect that one of the company directors chairs the Traffic Safety Committee and its members comprise all the heads of department in the company, as this illustrates the safety commitment of the company • The plan includes lengthy descriptions of the functions and duties of the various corporate and operating departments in the company, but does not address what each department does for safety. One or two simple sentences should explain the safety roles and responsibilities to help focus the various department activities on safety
II. Transport safety operation plan		
<ul style="list-style-type: none"> • Enterprises and cooperatives doing business in passenger transport on fixed routes, by bus must have: <ul style="list-style-type: none"> • vehicle safety assurance plan including total number of vehicles, average vehicles in operation, periodical maintenance and repair plans, daily vehicle safety inspection report (including the inspection of itinerary supervision devices’ condition) • operation schedule for 	<ul style="list-style-type: none"> • Each of the fixed routes operated by the company are described in the transport safety plan. The plan also specifies: <ul style="list-style-type: none"> • the number of vehicles that are operated, drivers and attendants that are employed, and daily trips • a maximum number of hours per day (7) and hours of continuous work (3) for each driver • that all company drivers hold valid driver licences 	<ul style="list-style-type: none"> • The safety risks on the routes are assessed before approval, but should be reviewed on a regular basis (perhaps once a year) or as conditions have been reported to change. • 6 monthly medical fitness to drive checks, maximum hours to control fatigue, GPS to monitor speed, and daily licence checks should be supplemented by random alcohol testing by the safety inspection team before and during shifts –

<p>vehicles in a transport circle (one round including time for passenger embarkation and disembarkation and mandatory delay and rest) on operation routes to prevent over speeding.</p> <ul style="list-style-type: none"> labor organizing plan for drivers and service staff including the total number of drivers with appropriate driving licenses, average number of drivers capable of working, drivers' working hours, vehicle's operation hours on fixed routes and other similar factors for service staff Enterprises and cooperatives doing business in passenger transport by taxi and cargo transport must also have a vehicle safety assurance plan; an operation schedule for each contract; and a labor organising plan for drivers and service staff. 	<ul style="list-style-type: none"> that vehicle maintenance and service activities are performed in accordance with regulations The plan does not address daily vehicle safety inspection reports (including inspection of itinerary supervision devices); or an operation schedule for vehicles to prevent over speeding. The plan addresses contract services, which is a very small part of the business, separately 	<p>this testing should be conducted using commercially available portable breath testing devices rather than simple observation</p> <ul style="list-style-type: none"> The company has a policy of renewing its bus fleet every ten years, with approximately 20 newbuilt buses purchased in the last 3 years, and more planned to be purchased in future years. This will increase the inherent safety of the operations and this vehicle purchasing policy should be reflected in the plan Specific attention is given by the company to where and how passengers embark and disembark buses and should be reflected in the plan The transport safety plan should integrate both fixed route and contract services, so that the same safety controls are applied to contract services The transport safety plan should be reviewed once a year by the Board, and assessed against its ability to achieve the desired results
<p>III. Traffic safety propaganda and education</p>		
<ul style="list-style-type: none"> Plan to propaganda and communicate laws and regulations on traffic order and safety and educate profession ethics and provide skill training for drivers and service staff (if applicable) 	<ul style="list-style-type: none"> The plan refers to regular communication and reminders to staff regarding traffic safety and compliance with regulations 	<ul style="list-style-type: none"> The plan should also reflect the training received from the bus manufacturer, and how the importance of maintenance is promoted in line with this training.
<p>IV. Traffic safety and order inspection and supervision</p>		
<ul style="list-style-type: none"> Monitor and supervise the practice of drivers through vehicles' itinerary inspection devices to ensure the compliance with traffic safety and order regulations <ul style="list-style-type: none"> Establish measures and forms to collect data of traffic law violations basing on criteria including itineraries, speed, continual driving 	<ul style="list-style-type: none"> The plan refers to daily reporting on data from journey surveillance devices and on compliance with traffic safety regulations by drivers and attendants 	<ul style="list-style-type: none"> Reporting should focus on key safety issues only and not include company regulations such as uniforms which do not relate to safety The safety inspection team should also perform an audit function to ensure other safety critical aspects are being addressed, such as daily licence and vehicle roadworthiness checks, or

<p>time and parking violations</p> <ul style="list-style-type: none"> • Procedures, methods and equipments to warn drivers while operating vehicles • Responding measures in case of accidents related to transport companies' vehicles • Inspect and check drivers and service staff's compliance with traffic safety and order regulations. 		<p>programmed vehicle maintenance</p>
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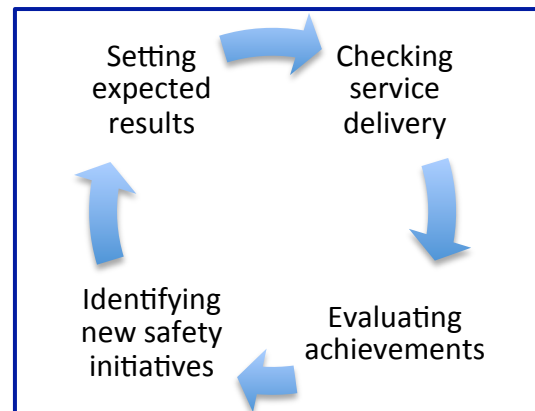
In summary, the company can demonstrate a commitment to traffic safety but this can be better reflected in its traffic safety assurance plan; further improvements to company processes appear achievable in the short term; and some gaps in how safety is currently being managed within the company need to be addressed.

Specifically, it is recommended that:

- the traffic safety assurance plan should be amended to provide greater assurance on traffic safety by nominating one of the company directors to chair the Traffic Safety Committee which would demonstrate top management commitment to the safety of the operations
- the traffic safety assurance plan could also commit the company to a policy of renewing its vehicle fleet every ten years with newbuilt buses, which is understood to be current practice, and can be expected to maintain relatively high levels of safety technology to protect its customers and other road users
- the safety risks along fixed routes should be regularly assessed (at least once a year) as safety conditions on the road are subject to change
- alcohol testing should be conducted with commercially available devices to more accurately assess alcohol consumption and impairment issues amongst drivers
- the safety inspection team should perform a wider audit function to ensure all safety critical aspects are being addressed, such as daily licence and vehicle roadworthiness checks, or programmed vehicle maintenance, not just the aspects monitored by the itinerary inspection devices or the activities of drivers
- the company Board should document in its traffic safety assurance plan the safety results the company is trying to achieve, whether in terms of intermediate results (such as breaches of company safety policies) or final results (such as non-injury crashes), and monitor those results
- the company Board should (at least on an annual basis) regularly review the traffic safety assurance plan, the adequacy of the assurance plan to achieve the safety results it wants, and the safety improvements that are needed.

Aside from these recommendations for the company itself, it appears that there are several gaps between what can be expected from a safety management system, and what is required in current regulations.

It is important that new mechanisms are established within traffic safety assurance plans which more explicitly address these safety management issues: setting expected results; checking service delivery (beyond simple compliance with journey surveillance devices); evaluating achievements; and identifying new safety improvement initiatives. An ongoing improvement cycle is set out to the right.



As these mechanisms are developed, it can be expected that stronger safety cultures will develop within the companies and their risk of involvement in fatal and serious injury incidents on the road will continually reduce.

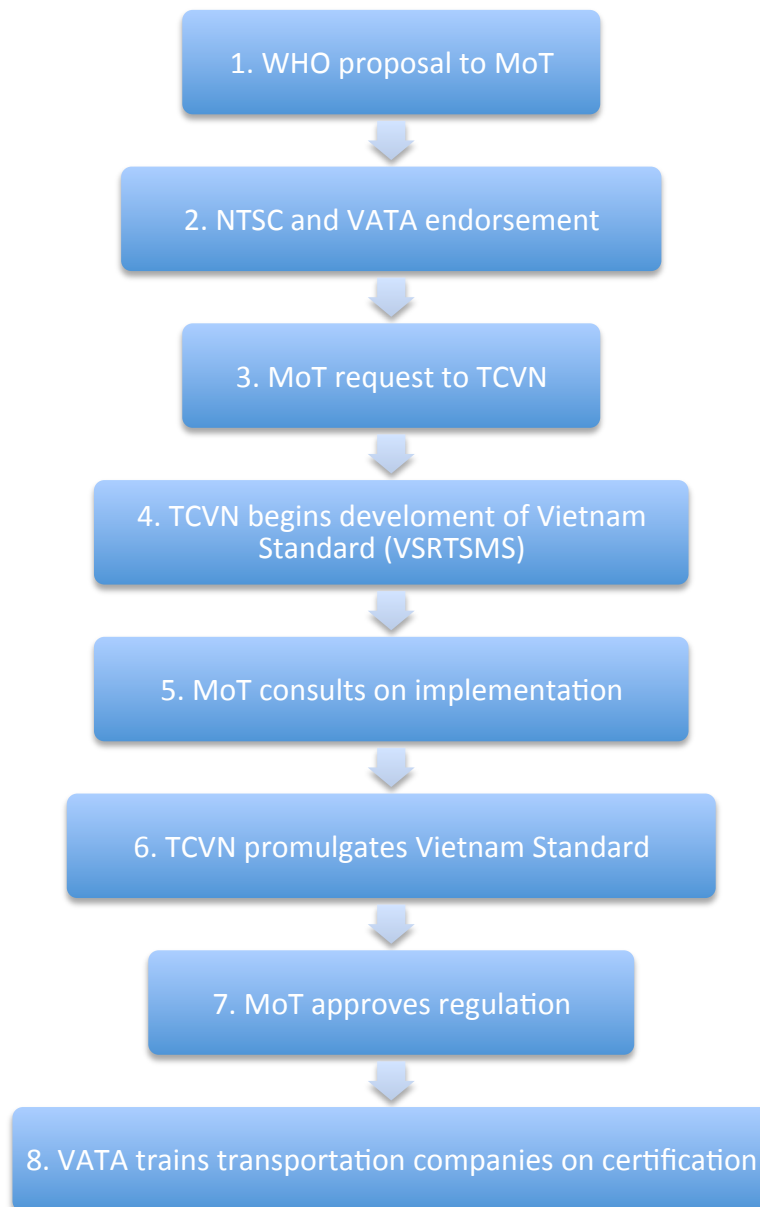
Roadmap for adoption of ISO 39001 in Vietnam

Vietnamese companies can become certified to ISO 39001 now, and larger companies within the transportation industry should be encouraged to do so. However, discussion with the Vietnam Standards and Quality Institute (TCVN), which is Vietnam's national member body within the International Standards Organisation, highlighted the longer-term value of developing a Vietnam Standard based on ISO 39001 – referred to now as Vietnam Standard for Road Traffic Safety Management Systems (VSRTSMS). This path has been successfully followed in Vietnam with other ISO management standards such as ISO 27001 Information Security Management, and ISO 50001 Energy Management.

Based on this advice, this section sets out a 9 stage roadmap for adoption and implementation of ISO 39001 within Vietnam. Stages 1-6 focus on the development of the Vietnam Standard, and key aspects of these stages are noted below. Stages 7 and 8 focus on its implementation, and it is proposed that these are subject to consultation with the industry (in stage 5). A broader discussion of implementation options are set out in the next section.

1. *WHO forwards to Ministry of Transport (MoT) a proposal for Vietnam Standard adopting original ISO 39001 text.* WHO has raised awareness of ISO 39001 as a best practice safety management tool consistent with the safe systems approach to road safety and UN Decade of Action on Road Safety, and gained the support of the transportation industry in doing so.

Roadmap



2. *National Traffic Safety Committee (NTSC) and Vietnam Automobile Transportation Association (VATA) endorse proposal.* The adoption and application of ISO 39001 within Vietnam requires support from key partner organisations for the safety benefits to be fully realised.
3. *MoT prepares and forwards to Vietnam Standards and Quality Institute (TCVN) a request to develop VSRTSMS.* For ISO 39001 to become embedded in how the transportation industry in Vietnam conducts business, it needs to be transformed into a national standard by the TCVN.
4. *TCVN begins development of VSRTSMS.* It is expected that the processes required to develop a national standard will take 12-18 months to complete.

5. *MoT consults with relevant national authorities and VATA on scope and timing of future application of VSRTSMS. The specific application of ISO 39001 to the transportation industry requires consideration from key partner organisations*
6. *TCVN promulgates VSRTSMS on road traffic safety management systems and prepares competency requirements for suppliers of audit and certification services*
7. *MoT approves regulation on application of the VSRTSMS, setting a staged timetable through to 2021 for certain sectors of the transportation industry to become certified, starting with long-haul passenger transport*
8. *VATA in collaboration with MoT to provide transportation companies with training on road traffic safety management systems and on requirements for certification.*

Implementation approach

In the interests of promoting shared responsibility, the stage 5 consultation between the MoT, relevant national authorities and the VATA is critical. As a possible input to this consultation, some consideration is given to how implementation of VSRTSMS can be staged.

The proposed implementation approach is through government regulation, in which the Ministry of Transport requires all companies providing passenger and goods transportation services to certify their operations to VSRTSMS. If this path is pursued, it is important that the implementation requirements are set well in advance. This provides all companies time to gain certification, and some companies to demonstrate their safety credentials in advance of their competitors.

Regulations could set out a timetable for different segments of the transportation market, starting with long haul passenger services. This transportation sector involves long journeys at high speeds and large numbers of passengers (factors which all increase exposure to risk), and a number of high-profile crashes have occurred in this sector. Other simple segmentation of the transportation market could see requirements built up over time on long-haul freight cargo services, short passenger services and short cargo services.

A possible timeframe for implementation is set out below:

December 2016	TCVN promulgates VSRTSMS
January 2017	Ministry of Transport promulgates regulation to apply VSRTSMS within the transportation industry
January 2018	Ministry of Transport requires all long-haul passenger service operators to be VSRTSMS certified

January 2019	Ministry of Transport requires all long-haul cargo service operators to be VSRTSMS certified
January 2020	Ministry of Transport requires all taxi and bus service operators to be VSRTSMS certified
January 2021	Ministry of Transport requires all cargo service operators to be VSRTSMS certified

Another possible approach for implementing VSRTSMS may be for the Ministry of Planning and Investment to require all government contracts for goods and passenger transport to be delivered by companies which have been certified to VSRTSMS. Options for staged implementation of this approach include:

- introducing a lead time of 12 months – this would provide transportation companies with sufficient time to develop a safety management system which can be implemented and certified to VSRTSMS, before being incorporated as a requirement for any new national government contracts for transportation.
- introducing requirements for contracts above a certain value – this would recognise the greater capacity that a larger transportation company will have for gaining VSRTSMS certification in the short term, and provide companies working under lower value contracts more time to gain certification.

This approach may not be as effective in implementing VSRTSMS, but may complement a regulatory approach. The most important consideration in setting the implementation roadmap is that the Vietnamese passenger and cargo transportation industry can provide the additional traffic safety assurance that certification to VSRTSMS will provide.

Another very important consideration is that implementation is staged in such a way that will support the development of a supply of third party providers of audit and certification services. A staged approach will also allow lessons to be learned from earlier stages of the process and passed on as more transportation companies become certified to VSRTSMS.

Shared responsibility

The implementation of 39001 in Vietnam should be approached as a shared responsibility between the Government of Vietnam, the VATA and transportation companies. Each has an important role to play, and in developing an implementation plan it may be important for the MoT to form a steering group to oversee what would be an important road safety reform for Vietnam.

The proposed roles and responsibilities of the three parties in this reform are:

- the primary role of Government is to set the national standard – it needs to promote the development of VSRTSMS, consult with the VATA the NTSC and

other major stakeholders on how to implement VSRTSMS, promulgate regulations and support their implementation

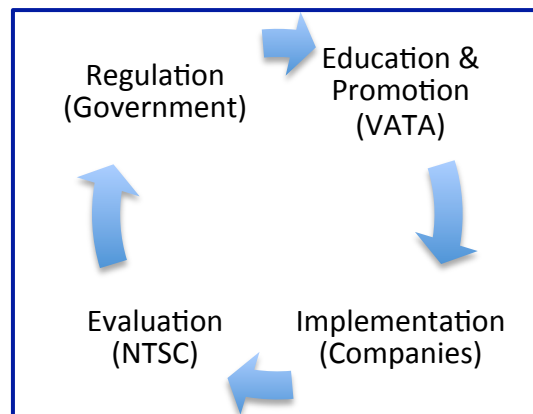
- the primary role of VATA is to promote VSRTSMS – it needs to endorse the development of VSRTSMS, advise the Government on how it should be implemented, promote VSRTSMS to the industry, and provide training to the industry on how to gain certification
- the primary role of transportation companies is to implement VSRTSMS – the companies need to participate in training and development opportunities as the VSRTSMS is being developed, familiarise top management with the requirements in the VSRTSMS, and allocate resources to implementing VSRTSMS.

It would be useful for all three parties to play a role in monitoring and improving the implementation of the standard over time. For example, over time:

- government could consider whether to review the delivery of its own safety audit processes in the light of the application of VSRTSMS
- the VATA may need to consider how to provide continued education and promotion support as safety management systems become more established and sophisticated
- the transportation companies may also need to consider how to improve the integration of its safety management system within its business operations.

As each stage of the implementation process is undertaken, lessons should be learned and applied to the next stage.

This strengthening of road traffic safety management disciplines may also benefit from a further party, such as the National Traffic Safety Council, becoming involved in evaluating progress, and providing input back to Government for further improvement or update of regulations. A simple schema for continually improving road traffic safety management systems within the Vietnam context is set out here.



ISO 39001 provides a strong opportunity for Vietnam to leverage its current attention to traffic safety assurance within the transportation industry. By assuming both a leadership role, and adopting a shared responsibility approach to implementation with VATA and other key stakeholders, the Ministry of Transport can build a stronger platform for sustained safety improvement in road traffic safety over the next decade.

Attachment 1: Key considerations for implementing ISO 39001

An organisation seeking certification to ISO 39001 needs to follow a simple quality management cycle.

Plan	<ul style="list-style-type: none"> Identify the impact the organisation can have on road safety, and how this relates to stakeholders, and determine the scope of its road safety management system. Establish leadership commitment to the management system, including adopting a long-term vision to eliminate death and serious injury. Establish and communicate a road safety policy, and assign organisational roles and responsibilities. Determine road safety risks and opportunities, and establish safety performance factors which are relevant to the organisation. Set road safety objectives and targets, and develop action plans.
Do	<ul style="list-style-type: none"> Implement and operate the road safety management system and ensure that sufficient capacity is provided for the key system functions to allow the identified actions to be carried out, and objectives and targets to be met.
Check	<ul style="list-style-type: none"> Monitor and evaluate its road safety performance, conduct internal audits and periodic reviews of the management system to identify opportunities to continue improvement, achieve road safety results and make necessary changes in the road safety management system.
Act	<ul style="list-style-type: none"> Improve the road safety management system following review of performance against its road safety objectives and targets, and identify corrective action and opportunities for preventive action.

Using good project planning disciplines, and assuming a nominal goal of achieving certification over a 12 month period, key activities required for a company to gain certification can be broken down over four quarters of three months each.

Quarter 1	<ul style="list-style-type: none"> Gain top management commitment Define scope of the management system and key processes Gather resources and develop implementation plan Undertake a gap analysis between what the Standard requires, and already exists within your organisation Identify any training needs
Quarter 2	<ul style="list-style-type: none"> Conduct any training that is needed for particular staff Prepare documentation of management system and processes, using common form and templates Begin to implement new processes, and refine as necessary, possibly undertake corrective actions, develop monitoring systems Identify a small group of internal auditors
Quarter 3	<ul style="list-style-type: none"> Full implement the management system, following all procedures Identify and take corrective/preventive actions as needed Keep records Undertake internal audit of RTSMS, and any resulting corrective actions Perform initial management review – check status of implementation, review initial results etc
Quarter 4	<ul style="list-style-type: none"> Begin preparation for certification Engage third party certification company for initial external audit to check documentation against Standard requirements, assess audit and management review results Take any corrective actions necessary, and prepare for next certification audit, including interviews with personnel and observation of activities, as well as documentation review.

ISO 39001 requires organisations wishing to gain certification to identify which of ten intermediate safety performance factors are relevant to its business, and then to set specific objectives and targets accordingly. The relevance of each factor for a major passenger transportation company is assessed in the table below, along with an indicator of why that factor is important and what could be done.

Safety Factor	Relevance	Examples of potential action
Road design and safe speed	Medium – primarily an input to journey planning	Assess safety of routes and necessary speed restrictions when undertaking journey planning
Use of appropriate roads	Medium – primarily an input to journey planning	Assess appropriateness of vehicle to road when undertaking journey planning
Using safe driving speed	High – speeding is a major risk to employee, customer, and bystanders	Awareness raising for drivers; setting and enforcing rules to prohibit speeding; introducing speed limiter technology on vehicles
Fitness of drivers	High – lack of fitness a major risk to employees, customers, and other road users	Awareness raising for drivers; setting and enforcing rules to control fatigue, as well as phone, drug and alcohol use; interlock technology to eliminate alcohol impaired driving
Use of personal safety equipment	High – non use is a major risk to employees and customers	Provision of seatbelts for occupants on long distance bus routes; setting and enforcing rules for use of seatbelts by drivers and passengers
Safe journey planning	High – route selection/scheduling have major impacts on risk profile	Setting and enforcing scheduling rules to ensure fit drivers of fit vehicles, on well timed routes
Safety of vehicles	High – roadworthiness, passenger loading, and technology capability to avoid crashes and protect occupants are critical	Setting and enforcing passenger loading rules, and vehicle maintenance procedures focusing on key steering, brakes, tyres, chassis, lights, and restraints; safety focussed vehicle purchase/lease policies
Appropriate authorisation to drive/ride	High – competent, licensed drivers are essential	Drivers meet minimum licensing requirements; additional training for high risk drivers, vehicles or routes
Removal of unfit vehicles and drivers/riders	High – drivers and vehicles that are unfit present a major safety risk	Vehicle maintenance and licence checks; and processes to withdraw unfit drivers or vehicles
Emergency preparedness & post-crash response	High – ability to respond is essential even when not at fault	Onboard crash alarms, first responder training

Compliance with ISO 39001 will require supporting documentation and management processes to ensure the system is effective and is continually improved over time. The management system should focus on controlling key safety risks, support business improvement, and avoid burdening the business with unnecessary activity.

Attachment 2: The safe system approach to road safety

The Organisation for Economic Cooperation and Development and the International Transport Forum published a landmark report in 2008 *Towards Zero: Ambitious Road Safety Targets and the Safe System Approach*. It was inspired by the reframing of road safety as a societal health issue in the best performing countries such as the Netherlands and Sweden, and prompted by ambitious road safety targets set in Europe and other high-income countries such as Australia and New Zealand.

The report documented what has become known internationally as the “Safe System” approach, and a management framework developed within the Global Road Safety Facility to assist in implementing it. The report characterised safe system principles as:

- aiming to develop a road transport system better able to accommodate human error, commonly achieved through better management of crash energy, so that no individual road user is exposed to crash forces likely to result in death or serious injury.
- incorporating many strategies for better management of crash forces, with a key strategy being road network improvement in conjunction with posted speed limits set in response to the level of protection offered by the road infrastructure.
- relying on strong economic analyses to understand the scale of the trauma problem, and direct investment into those programs and locations where the greatest potential benefit to society exists.
- (being) underpinned by comprehensive management and communication structures incorporating all key government agencies and other organisations which have a role in determining the safe functioning of the transport system.
- aligning safety management decision making with broader economic goals and human and environmental health goals, and create a commercial environment that generates demand for and benefits the providers of safe road transport products and services.
- embracing the ethos of “shared responsibility” for road safety among the various actors of the road transport system, such that there is a shared vision amongst citizens, public, private and not for profit organisations regarding the ultimate safety ambition of eliminating fatalities and serious injuries, and how to achieve it.

These principles should not be regarded as fixed, but they stand in stark contrast to largely discredited approaches of the past which have presented road safety as a task of perfecting human behaviour, or relied on education and information campaigns to reduce road trauma.

ISO 39001 Road Traffic Safety Management Systems provides organisations with a mechanism through which the safe systems approach can be embedded within the organisation, and the organisation can demonstrate and market its safety credentials to others.