# Onboarding the NSSR Handbook for Sales/Showrooms

By

Venkatram K S (Gap Analyst, AOEC)

Aakkash K V (Emerging Analyst, BTECH & PGDM)

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### 1. Due Acknowledgment

We extend our special gratitude to the Honorable Secretary of the National Safety Council, Bengaluru – Karnataka Chapter for enabling us to take up this pilot and survey for delivering a handbook on improving road safety via customer engagement sensitization, readiness and related exercises.

We wish to acknowledge our sincere gratitude for all valuable guidance and constructive suggestions in the preparation of the handbook.

We wish to acknowledge the automobile dealer network for the brand \_\_\_\_\_\_ ir helping us evaluate a pilot of the handbook.

We thank all other people directly and indirectly connected to this mission of improving road safety.

**ANALYST NAME: VENKATRAM K S** 

Associate ANALYST NAME: AAKKASH K V

#### Cost Benefit Analysis for the NSSR-RS Handbook

Why is the NSSR-RS Handbook needed?	Editioning
The NSSR-RS Handbook can help	☐ Digital form
Condition assessment/Problem determinism	☐ Printed form (size 29.7 cm x 21 cm)
☐ Definitive Inventory	☐ Online version
Demand conditioning and enabling	☐ NSSR-RS Pull-out Holder
Customer Support for Anytime Anyhow and	☐ Social Responsibility Addition to any Vehicle
Anywhere service incorporation	Document Holder
The NSSR-RS Handbook can make a difference to	
☐ Forward Lifetime investments for safe and	Price-points
sustainable commuting	☐ Accelerates synergy for safe and sustainable
☐ 4P(s) and 6M(s) for safety	commuting
The NSSR-RS programme views the following as	☐ Adds and helps value perpetuation for social
important for its success:	responsibility towards road safety
Infrastructure and Training facilities	☐ Furthers Anytime-Anywhere-Anyhow service
☐ Training capacity/roadmap	incorporation with Nth Line Support Liaison and
☐ Training Instructors	Supply Chain Collaboration
☐ Centre of Excellence framework (NSSR-RS-COE)	☐ Granularity-Accountability-Transformability to
Continual consistency, control and commitment for	reduce accidents via Active Culture,
the NSSR-RS curriculum	Commitment and Incorporation

#### 2. Understanding of product and service quality

#### **Quality of automobile products and services**

- Excellent design, aesthetics, and attention to detail
- ✓ Right for Health & Safety (of the customer/consumer)
- ✓ Conducive work influencers
- ✓ Excellent part/product/assembly engineering and ergonomics.
- ✓ Right materials with test assurance
- ✓ Reduced incidence rate or likelihood
- Entry-level or supportive timing
- ✓ Equipped with Performance data
- ✓ Conducive inventory turnover rate

#### 3. Understanding of customers and the market

#### **Understanding of the market for automobile products and services**

- ✓ Target population
- ✓ Demography
- ✓ Customer segmentation
- ✓ Customer trends
- ✓ Customer satisfiers
- ✓ Customer interest in Health and Safety
- ✓ Customer interest to adapt, and adopt recommendations, guidelines and regulations

#### 4. Understanding of customer satisfaction

#### Understanding of customer satisfiers

- ✓ Assurance for key factors such as standards, safety, quality, reliability, and responsiveness
- ✓ Appropriate cost of quality and defect sampling rate (for change in technology and/or change in innovation strategy)
- ✓ Appropriate understanding and guidance strategy (to match demand and supply)
- ✓ Appropriate organizational culture for National Safety Social Responsibilities (NSSR), Connected Quality management, Connected Road Safety management, and Customer Relationship Management
- ✓ Appropriate systemic responsiveness for needs, enablers, benefits analysis, incidences, complaints, feedback and/or competition

#### Key indicators of customer satisfiers

- ✓ Timely "needs-understanding" of customer segment for road safety enablers.
- ✓ Timely incidence acknowledgment/management
- ✓ Zero or minimum returns/rejects/incidences/complaints
- ✓ Zero operational defects, safe, well-maintained & optimally performing vehicles, assist & safety systems

### 5. Culture of National Safety Social Responsibilities (NSSR)

Trusted Emergence in National Safety Council programmes for Road Safety could mean

Designing and developing a culture for road safety with **Proven granularity, Accountability and** 

**Transformability** at the macro and micro levels.

**Proven granularity** could mean defining a NSSR for Road Safety Scorecard, where there is a commitment to incorporate a series of knowledge enabled exercises to sensitize, prepare, deploy, assess and monitor road safety practices adhered to at

	Tha	Dealer	<b>Network</b>	laboM	امريما
$\blacksquare$		Dealer	INCIWOIK	IVICICIEI	IEVEI

☐ The Customer / Commuter level

☐ The **Learning and Growth level** to help strategize NEXT steps for knowledge centric programmes

☐ The **Deep Interaction Link level** to help strategize alignment for NSSR for road safety in the nature of purchase, nature of ownership and nature of association at the CRM/SCM/FLT levels

ATTN: The mentioned Abbreviations mean

CRM: Customer Relationship Management

SCM: Supply Chain Management

FLT: Forward Lifetime Theory

### 5.1 Culture of National Safety Social Responsibilities (NSSR)

- ☐ The **Dealer Network Model level** by designing incorporations like the NSSR Handbook that is to be communicated about and given to the customer along with the Owner's manual
- ☐ The communications and reviews at the dealership level should be
- ✓ About Customer Health and Safety
- ✓ About solution finding to help the Customer adapt, and adopt NSSR recommendations, guidelines and regulations specific to Road Safety

### 5.2 Culture of National Safety Social Responsibilities (NSSR)

- ☐ The **Customer / Commuter level** by designing incorporations for the customer to survey, assess and report responses for
- ✓ Timely "needs-understanding" for road safety practices or enablers.
- ✓ Timely incidence acknowledgment/management for road safety practices or enablers.
- ✓ Record of returns/rejects/incidences/complaints about road safety enabling incorporations, products and services
- ✓ Record of packaging defects of road safety enabling incorporations, products and services

### 5.3 Culture of National Safety Social Responsibilities (NSSR)

- ☐ The Learning and Growth level to help strategize NEXT steps for knowledge centric programmes that rely on
- ✓ Appropriate organizational culture for National Safety Social Responsibilities (NSSR), Connected Quality management, Connected Road Safety management, and Customer Relationship Management
- ✓ Appropriate NSSR systemic assurance for standards, safety, quality, reliability, and responsiveness for needs, enablers, benefits analysis, incidences, complaints, feedback and/or competition

### 5.4 Culture of National Safety Social Responsibilities (NSSR)

- ☐ The **Deep Interaction Link level** to help strategize alignment for NSSR for road safety in the nature of purchase, nature of ownership and nature of association at the CRM/SCM/FLT levels for
- ✓ Excellent part/product/assembly engineering and ergonomics
- ✓ Right materials with test assurance
- ✓ Excellent design, aesthetics, and attention to detail
- ✓ Right for surveys/studies of NSSR specific Health & Safety (of the customer/consumer)
- ✓ Conducive purchase/ownership/maintenance influencers
- ✓ Conducive inventory turnover rate
- ✓ Conducive NSSR surveys/studies/reports for Road Safety

#### 6. Drive India NSSR-RS Units

Units 1 to \_\_\_\_ are part of the NSSR Commitment to incorporate a series of knowledge enabled exercises to sensitize, prepare, deploy, assess and monitor road safety practices adhered to by a driver/commuter/customer engagement for NSSR-RS provider (proposed to be a NSSR-RS Desk sending out notifications and proactive responses by the NSSR-RS sensitized traffic management network)

Working through any of the Units 1 to \_\_\_\_, will need the NSSR responder to review

- An Introduction to the unit
- ii. The Key Learning of the unit
- iii. The Safety Focus and Criteria of the unit
- iv. The Hazards Analysis for the unit
- v. The NSSR specific Involvement for the unit
- vi. The expected Responses reported for the unit
- vii. The Complaints commonly reported for the unit



#### i. An Introduction to the unit

RTO (Regional Transport Office) traffic signs are crucial for road safety and efficient traffic flow, providing drivers with essential information and instructions to prevent accidents and ensure smooth travel. They serve as a visual language, conveying rules, warnings, and directions to all road users.

More specifically, mandatory traffic signs indicate rules and regulations that drivers must follow, such as speed limits, one-way streets, and no-entry zones, ensuring smooth and orderly traffic movement.

Valuable examples of Mandatory Traffic Signs:

- **Stop Sign:** Indicates that drivers must come to a complete stop.
- One-Way Sign: Indicates that traffic is allowed to flow in only one direction.
- **No Entry Sign:** Indicates that vehicles are not allowed to enter a particular area.
- Speed Limit Sign: Indicates the maximum speed allowed on a particular road.
- Give Way Sign: Indicates that drivers must yield to other traffic.
- No Parking Sign: Indicates that parking is prohibited in a particular area.
- Truck Prohibited Sign: Indicates that trucks are not allowed to enter a particular area.
- Vehicles Prohibited Sign: Indicates that vehicles are not allowed to enter a particular area.

#### The Key Learning of the unit

1. Violation of these signs could lead to serious accidents

2. Violation of these signs lead to punishments, penalties and fines



Stop

Give Way



No Entry

आने वाले यातायात को प्राथमिकता Priority for Oncoming Traffic



का आना मना है All Motor Vehicles Prohibited



मना है हाथठेलों का आना मना है Truck Prohibited Bullock & Hand Cart Prohibited



आना मना है Bullock Cart Prohibited



तांगों का आना मना है Tongas Prohibited



साइकिलों का आना हाथ ठेलों का आना मना है Hand Cart Prohibited



मना है Cycle Prohibited



पदयात्रियों का आना मना है Pedestrians **Prohibited** 



मना है Right Turn मना है Left Tum Prohibited Prohibited



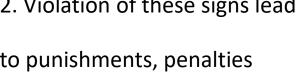
(यू-टर्न) मना है U-Turn Prohibited



ओवरटेकिंग हॉर्न बजाना मना है (आगे निकलना) Prohibited Overtaking Phohibited



Width Limit





ऊंचाई सीमा Height Limit



लंबाई सीमा Length Limit



भार सीमा Load Limit



एक्सल भार Axle Load Limit



Speed Limit



गाडी खडी करना मना है No Parking



गाडी रोकना या खंडा करना No Stopping or



Horn

बाएं मुडना अनिवार्य (दाएं यदि संकेत विपरीत है) Compulsory Turn Left (Right if Symbol is Reversed)



(केवल आगे) Compulsory Ahead (Ahead only)



मुडना अनिवार्य (बाएं यदि संकेत विपरीत है) Compulsory Turn Right Ahead (Left if Symbol is Reversed)



आगे चलना या दाएं मुड़ना अनिवार्य Compulsory Ahead or Tum Right



आगे चलना या बाएं मुडना अनिवार्य Compulsory Ahead or Turn Left



बाएं रहकर चलना अनिवार्य Compulsory Keep Left



अनिवार्य साइकिल Compulsory Cycle Track



हॉर्न बजाना अनिवार्य Compulsory Sound Horn



अनिवार्य न्युनतम गति Compulsory Minimum Speed



रोक समाप्ति चिन्ह Restriction Ends

#### iii. The Hazards Analysis for the unit

☐ The Road Safety Unit 1 (Mandatory Traffic Signs) helps understand the rules of the road and avoid dangerous situations	d potentially
$lue$ The Road Safety Unit 1 (Mandatory Traffic Signs) develops rules like speed limits and one-way ${\sf tra}$	ffic
The Road Safety Unit 1 (Mandatory Traffic Signs) produces more organized and efficient traffic floreducing congestion and accidents.	)W,
☐ The Road Safety Unit 1 (Mandatory Traffic Signs) reduces accidents due to collisions and ensures of all road users	the safety
☐ The Road Safety Unit 1 (Mandatory Traffic Signs) provides information about road conditions, haz directions, therein helps drivers navigate roads safely and efficiently	ards, and
☐ The Road Safety Unit 1 (Mandatory Traffic Signs) underline legal compliance for rules/directive in where a violation leads to fines and other penalties	formation,

#### iv. The Social Responsive Involvement for the unit

	specifically adhering to visual	s a need for social responsiveness by the driver/commuter/user of the road for information that help road safety. The visual information in a traffic sign, is for common (PIEV) abilities to organize and manage traffic.
	The NSSR-RS Unit 1 Scorecard adhering to the Key Learning	l enables a NSSR responder to state issues or unsatisfactory experiences while of the unit
•	1. The Mandatory Traffic Sign (	) and its Perception ability helps response/needful action for road safety (Tick as applicable):
•	Poor/ Fair/ Medium score/ Good	
•	2 The Mandatory Traffic Sign (	) and its expectations of the Intelligence level helps response/needful action for road safety (Tick as applicable):
•	Poor/ Fair/ Medium score/ Good	
•	3. The Mandatory Traffic Sign (applicable);	) and its expectations of the Emotional makeup/quotient helps response/needful action for road safety (Tick as
•	Poor/ Fair/ Medium score/ Good	
•	4. The Mandatory Traffic Sign ( as applicable);	) and its expectations of the Volition (Self enabled Action) level helps response/needful action for road safety (Tick
•	Poor/ Fair/ Medium score/ Good	

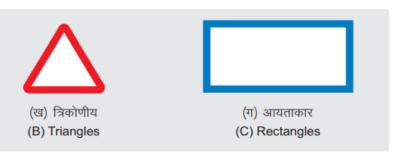
v. The expected Responses reported for the unit and it's enabling of road safety

The traffic signs are of 3 types

☐ Type 1: Directs or Gives orders

☐ Type 2: Warns

☐ Type 3: Gives information



#### As a further function

(क) गोल

(A) Circles

- Red circles with Blue filled backgrounds give mandatory information'
- Red Triangles warn
- Blue rectangles give information
- Some traffic signs have different shapes and depicted colour rules to give more prominence

Shape: Circle

Shape: Triangle

Shape: Rectangle



#### As the Government of India policy that interlinks RTO(s)

Traffic signs or markings are placed alongside, at, or above a road, highway, ring road, pathway, or route to guide, inform or warn or regulate the flow of traffic along that route.

They can also give advance information about the road conditions ahead.

Traffic signs are planned and placed on routes, so drivers/commuters/road users are able to recognize them easily and act in time

#### vi. Complaints commonly reported for the unit

As road systems are planned with traffic signs by project departments and the RTO, they need to be monitored for expected road safety

The monitoring is done by Concerned Civic Bodies, Traffic Guides, Pollution Level Controllers and Emergency Response & Disaster Mitigation Teams for intervention, incidence mitigation and resolution

The common complaints about traffic signs and their deployments on roads and routes are whether they are of right guidance-standards, insightful for road safety, of correct quality, with expected reliability, and whether they can improve or regulate responsiveness



Reporting a complaint about accountability for traffic factors

Road system name: Road system Id:

Date of submission:

Mapping from:

Mapped till:

Mapping pending:

• Type of road system: Road/Stretch/Route/Ring road /Highway

• Type of transportation that uses road system: Public transport/Private transport/Pooled transport/Personal transport/Priority transport

• Added commuting systems: Overhead Metro/Underground Subway/Tram

• Current Risk Health: Warnings signs satisfactory/Acceptable driving conditions/Other reports/Do not know

Health details: ...

- Reporting a complaint about accountability for traffic factors
- Traffic signs concern:

• Associated images (to be uploaded in.jpeg format with details on location):

- Reporting a complaint about accountability for traffic factors
- Nature of congestion (Rated as important negative influences):
- () Perennial congestion
- () Seasonal congestion
- () Time-based congestion
- () Incidence specific congestion
- () Feeder Traffic specific congestion
- () Goods/Freight movement specific congestion
- () Congestion due to other influences

#### Impact on ☐ Sustainable Development & Growth ☐ Socio Economic Solutions ☐ Traffic Control ☐ Supply chaining ☐ TMS Logistics Environmental quality ☐ Incidence Response / Mitigation ☐ Fire fighting (amenity specific) / Fire Department response

- Reporting a complaint about accountability for traffic factors
- Required Signage deployed to mitigate risks to commuters or people
- () Road signs identifying traffic safety norms (one-way or two-way signs, permitted timings, speed limits, rules for pedestrian and passenger safety, rules about overtaking, rules against cutting lanes, rules for parking, signage about low visibility zone, low height clearance and load levels)
- () Signage for accident relief, emergency response and assistance (like contact information for the nearest "ambulance services, hospital, police station, fire department, disaster management department", associated civic body)
- () Signage and barricades around (perimeter) of potholes, poor quality manholes and septic systems
- () Signage with precautionary and must know information about ring road, flyover, bridge, tunnel, subway, metro track, tram track, and level crossing
- () Other issues:

- Reporting a complaint about accountability for traffic factors
- Nature of planning (crucial influencer)
- () **Design standards compliance** (width of road, margins for pillars, gradient designs, curves designs, median designs, arboriculture safety, pedestrian and passenger safety, safe commuting between 2 points, reasonable time taken to travel from one point to another, enablers for vehicles that use renewable energy)
- () Accountability for Traffic factors (speed standards set for road systems, reaction time based on PIEV\*, navigation standards, safe stopping sight distance, safe overtaking or passing, safe sight distance for entry into any associated intersections, feedback systems)
- () Quality of traffic signalling systems ("(Google Earth related) satellite imagery, or drone flight imagery or feedback based" NSSR-RS Desk notifications and proactive responses by the traffic management network, by nature of design "intelligent signaling solutions" that decide as to how traffic has to be managed or routed in case there is a disaster, accident, or in a case where part of the road or road system is rendered unusable)

- Reporting a complaint about accountability for traffic factors
- Nature of planning (crucial influencer)
- () Accountability for Environment factors (afflicted condition screening and risk mitigation for unforeseen snow fall, hailstorms, heavy rainfall, thunder storm and lightning arrestors, ease of maintenance despite severe weather conditions)
- () Maintenance Systems reliability (proper design out maintenance, risk mitigation & maintenance, inspection and maintenance of extensions, gradient-design validation, policy for emergency services, policy for disaster management services)
- () Quality of associated Drainage systems (design and implementation after consideration of water table, sub-grade soil, reinforced earth, nature of geo-grids that are to be used in the road construction, management of seepage flow & capillary rise, reliable impervious wearing surface of road with aggregators and binders)

- Reporting a complaint about accountability for traffic factors
- Nature of planning (crucial influencer)
- () Satisfactory Emergency Response planning (Equipped with signage and barricade deployment, contact numbers for nearest "ambulance services, hospital, police station, fire department, disaster management department", availability of first aid provisions, equipped with fire extinguishers & fire fighting facilities, equipped with smoke alarm systems, equipped with IoT sensors, has collapsible floor/ground escalation systems at designed locations to help evacuate passengers from elevated metro railways)
- () Equipped with (crime detection specific) surveillance sensors or Intelligent security systems that ensure fast track police control room assistance (related to Safety for women/Security for commuters and relevant assistance)
- () Other issues:



#### i. An Introduction to the unit

RTO (Regional Transport Office) traffic signs are crucial for road safety and efficient traffic flow, providing drivers with essential information and instructions to prevent accidents and ensure smooth travel. They serve as a visual language, conveying rules, warnings, and directions to all road users.

More specifically, cautionary traffic signs are meant to caution the driver or commuter about the conditions/hazards/situational issues of the road ahead..

Valuable examples of Cautionary Traffic Signs:

**Right Hand Curve:** The sign cautions about a right turn curve on the road ahead

Left Hand Curve: The sign cautions about a left turn curve on the road ahead

Right Hair Pin Bend: The sign cautions about a sudden sharp right turn curve on the hilly road ahead

Left Hair Pin Bend: The sign cautions about a sudden sharp left turn curve on the hilly road ahead

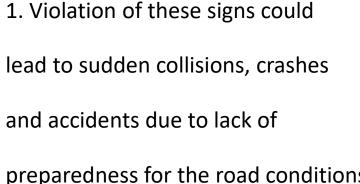
Steep Ascent: The sign cautions about a steep ascending slope on the hilly road ahead

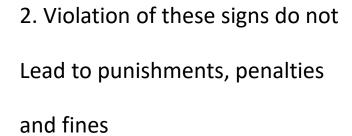
Steep Descent: The sign cautions about a steep descending slope on the hilly road ahead

Narrow Road Ahead: The sign cautions about the narrowing of the road ahead

Narrow Bridge Ahead: The sign cautions about the road ahead converging with a narrower bridge

#### The Key Learning of the unit

















Right Hand Curve

बायां मोड Left Hand Curve

दाहिना घुमावदार मोड़ Right Hair Pin Bend

बायां घुमावदार मोड़ Left Hair Pin Bend

दाहिने मुडकर फिर आगे Right Reverse Bend

बाएं मुड़कर फिर आगे Left Reverse Bend

खडी चढाई Steep Ascent

preparedness for the road conditions



सीधी ढलान Steep Descent



आगे रास्ता संकरा है Narrow Road Ahead



आगे रास्ता चौडा है संकरा पुल Narrow Bridge Road Widens Ahead



फिसलन भरी सडक

बिखरी बजरी Slippery Road Loose Gravel



साईकिल क्रॉसिंग Cycle Crossing



पैदल क्रॉसिंग Pedestrian Crossing



आगे स्कूल है School Ahead



यातायात संकेतक Traffic Signal



पशु Cattle



Ferry

नौका



पत्थर लुढकने की संभावना Falling Rocks



खतरनाक गहराई उभार या Dangerous Dip



ऊबड–खाबड सडक Hump or Rough Road



आगे अवरोध है

Barrier Ahead





मध्य पट्टी में अंतर

Gap in Median





चौराहा

Cross Road









Guarded



टी – तिराहा T-Intersection



वाई – सड़क संगम Y - Intersection





विषम सडक संगम Staggered Intersection



विषम संडक

गोल चक्कर



Quayside or

River Bank

Side Road Left



बायीं ओर पार्श्व सडक दाहिनी ओर पार्श्व सडक



Side Road Right







संगम Staggered Round About Intersection

#### iii. The Hazards Analysis for the unit

	The Road Safety Unit 2 (Cautionary Traffic Signs) helps relate to the conditions/hazards/situational issues of the road ahead
	The Road Safety Unit 2 (Cautionary Traffic Signs) develops awareness for curves, attention to detail, maneuverability and reduced speed limits
(	The Road Safety Unit 2 (Cautionary Traffic Signs) helps the driver engage the right gear to ascend or descend down a slope, helping more organized and efficient traffic flow, reducing sudden stops, restarts and accidents.
	The Road Safety Unit 2 (Cautionary Traffic Signs) reduces accidents due to sudden collisions and lack of preparedness crashes due to narrowing or unforeseen converging of the road ahead
(	The Road Safety Unit 2 (Cautionary Traffic Signs) provides information about slippery or debris afflicted road conditions, about hazards due to landslides or rock fall, and therein helps drivers navigate roads safely and efficiently
	The Road Safety Unit 2 (Cautionary Traffic Signs) do not require a driver to legally adhere to them, or do not need the payment of fines nor penalties

#### iv. The Social Responsive Involvement for the unit

	road safety. The visual in	gnizes a need for social responsiveness to relate to warning information that help afformation in a cautionary traffic sign, helps the drive maneuver, control speed, or function for the (PIEV) abilities required to ensure road safety.		
	☐ The NSSR-RS Unit 2 Scorecard enables a NSSR responder to state issues or unsatisfactory experiences while adhering to the Key Learning of the unit			
•	1. The Cautionary Sign (	) and its Perception ability helps prepared response/needful action for road safety (Tick as applicable):		
•	Poor/ Fair/ Medium score/ Good			
	2 The Cautionary Traffic Sign (applicable):  Poor/ Fair/ Medium score/ Good	) and its expectations of the Intelligence level helps prepared response/needful action for road safety (Tick as		
•	3. The Cautionary Traffic Sign ( (Tick as applicable);	) and its expectations of the Emotional makeup/quotient helps prepared response/needful action for road safety		
•	Poor/ Fair/ Medium score/ Good			
•	4. The Cautionary Traffic Sign (safety (Tick as applicable);	) and its expectations of the Volition (Self enabled Action) level helps prepared response/needful action for road		
•	Poor/ Fair/ Medium score/ Good			

v. The expected Responses reported for the unit and it's enabling of road safety

These traffic signs are of the type

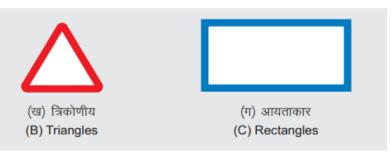
☐ Type 1: Directs or Gives orders

✓ Type 2: Warns

(क) गोल

(A) Circles

☐ Type 3: Gives information



#### As a further function

- Red Triangles warn
- Some traffic signs have different shapes and depicted colour rules to give more prominence

Shape: Circle

Shape: Triangle

Shape: Rectangle



#### As the Government of India policy that interlinks RTO(s)

Traffic signs or markings are placed alongside, at, or above a road, highway, ring road, pathway, or route to guide, inform or warn or regulate the flow of traffic along that route.

They can also give advance information about the road conditions ahead.

Traffic signs are planned and placed on routes, so drivers/commuters/road users are able to recognize the warning in them, prepare and act in time

#### vi. Complaints commonly reported for the unit

As road systems are planned with traffic signs by project departments and the RTO, they need to be monitored for expected road safety

The monitoring is done by Concerned Civic Bodies, Traffic Guides, Pollution Level Controllers and Emergency Response & Disaster Mitigation Teams for intervention, incidence mitigation and resolution

The common complaints about traffic signs and their deployments on roads and routes are whether they are of right guidance-standards, insightful for road safety, of correct quality, with expected reliability, and whether they can plan for, improve or regulate responsiveness



•	Reporting a co	mplaint about accor	untability for traf	ffic factors
---	----------------	---------------------	---------------------	--------------

Road system name: Road system Id:

Date of submission:

Mapping from:

Mapped till:

Mapping pending:

Type of road system: Road/Stretch/Route/Ring road /Highway

Type of transportation that uses road system: Public transport/Private transport/Pooled transport/Personal transport/Priority transport

• Added commuting systems: Overhead Metro/Underground Subway/Tram

• Current Risk Health: Warnings signs satisfactory/Acceptable driving conditions/Other reports/Do not know

Health details: ...

- Reporting a complaint about accountability for traffic factors
- Traffic signs / nature of expectation concern:

• Associated images (to be uploaded in.jpeg format with details on location):

- Reporting a complaint about accountability for traffic factors
- Nature of congestion (Rated as important negative influences):
- () Perennial congestion
- () Seasonal congestion
- () Time-based congestion
- () Incidence specific congestion
- () Feeder Traffic specific congestion
- () Goods/Freight movement specific congestion
- () Congestion due to other influences / conditional dynamics

#### Impact on ☐ Sustainable Development & Growth ☐ Socio Economic Solutions ☐ Traffic Control ☐ Supply chaining ☐ TMS Logistics Environmental quality ☐ Incidence Response / Mitigation ☐ Fire fighting (amenity specific) / Fire Department response

- Reporting a complaint about accountability for traffic factors
- Required Signage deployed to mitigate risks to commuters or people
- () Road signs identifying traffic safety norms (signage about sharp curves, bends, gradients, narrowing, low visibility zone, low height clearance and load levels)
- () Signage for accident relief, emergency response and assistance (like contact information for the nearest "ambulance services, hospital, police station, fire department, disaster management department", associated civic body)
- () Signage and barricades around (perimeter) of potholes, poor quality manholes and septic systems
- () Signage with precautionary and must know information about ring road, flyover, bridge, tunnel, subway, metro track, tram track, and level crossing
- () Other issues:

- Reporting a complaint about accountability for traffic factors
- Nature of planning (crucial influencer)
- () **Design standards compliance** (width of road, margins for pillars, gradient designs, curves designs, median designs, arboriculture safety, pedestrian and passenger safety, safe commuting between 2 points, reasonable time taken to travel from one point to another, unforeseen driving conditions for vehicles that use renewable energy)
- () Accountability for Traffic factors (speed standards set for road systems, reaction time based on PIEV\*, navigation standards, safe stopping sight distance, safe overtaking or passing, safe sight distance for entry into any associated intersections, feedback systems)
- () Quality of traffic signalling systems ("(Google Earth related) satellite imagery, or drone flight imagery or feedback based" NSSR-RS Desk notifications and proactive responses by the traffic management network, by nature of design "intelligent signaling solutions" that decide as to how traffic has to be managed or routed in case there is a disaster, accident, or in a case where part of the road or road system is rendered unusable)

- Reporting a complaint about accountability for traffic factors
- Nature of planning (crucial influencer)
- () Accountability for Environment factors (afflicted condition screening and risk mitigation for unforeseen snow fall, hailstorms, heavy rainfall, thunder storm and lightning arrestors, ease of maintenance despite severe weather conditions)
- () Maintenance Systems reliability (proper design out maintenance, risk mitigation & maintenance, inspection and maintenance of extensions, gradient-design validation, policy for emergency services, policy for disaster management services)
- () Quality of associated Drainage systems (design and implementation after consideration of water table, sub-grade soil, reinforced earth, nature of geo-grids that are to be used in the road construction, management of seepage flow & capillary rise, reliable impervious wearing surface of road with aggregators and binders)

- Reporting a complaint about accountability for traffic factors
- Nature of planning (crucial influencer)
- () Satisfactory Emergency Response planning (Equipped with signage and barricade deployment, contact numbers for nearest "ambulance services, hospital, police station, fire department, disaster management department", availability of first aid provisions, equipped with fire extinguishers & fire fighting facilities, equipped with smoke alarm systems, equipped with IoT sensors, has collapsible floor/ground escalation systems at designed locations to help evacuate passengers from elevated metro railways)
- () Equipped with (crime detection specific) surveillance sensors or Intelligent security systems that ensure fast track police control room assistance (related to Safety for women/Security for commuters and relevant assistance)
- () Other issues:



#### i. An Introduction to the unit

RTO (Regional Transport Office) traffic signs are crucial for road safety and efficient traffic flow, providing drivers with essential information and instructions to prevent accidents and ensure smooth travel. They serve as a visual language, conveying rules, warnings, and directions to all road users.

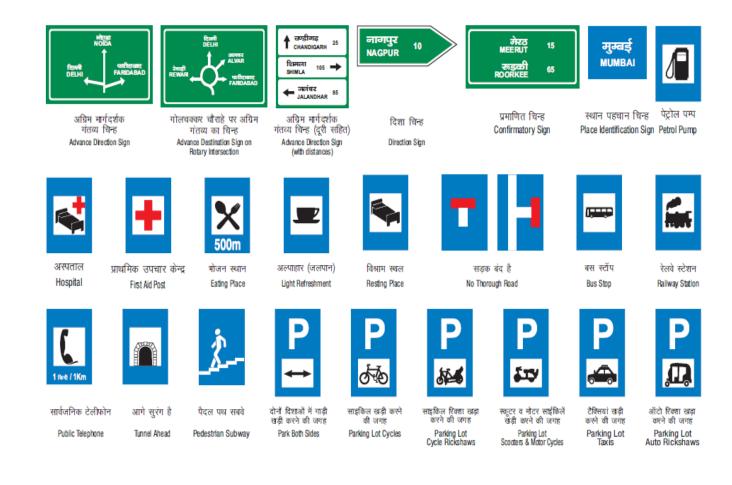
More specifically, informatory traffic signs are meant to inform the driver or commuter about the related route to be taken, distance to be travelled, time that will be needed to reach or about facilities of the road ahead..

Valuable examples of Informatory Traffic Signs:	Traffic signs are crucial for today's Strategic
☐ Tunnel Ahead	road infrastructure and road systems such as
☐ Pedestrian Subway	□Express ways, NICE roads
☐ Railway Station	□Border roads
☐ Bus stop	□Flyovers
☐ No Through Road	
☐ First aid Post	□Bridges
☐ Hospital	□Underpasses
☐ Place identification sign, Confirmatory sign	☐Link roads, road corridors
☐ Direction sign, Advance Direction sign	☐Ring roads

#### ii. The Key Learning of the unit

These signs help provide
 Information on direction,
 destination, road side
 facilities

These signs help a driver
 save time in driving and in
 deciding upon the well-equipped
 routes to be taken



iii.	The Hazards Analysis for the unit
	Like the Road Safety (Cautionary Traffic Signs), Unit 3 helps relate to the direction, destination, road side facilities on the road ahead
	Like the Road Safety (Cautionary Traffic Signs), Unit 3 develops awareness for routes, attention to detail, and driving time estimations
	Unit 3 (Informatory Traffic Signs) help subjectively recognize, guide, inform or regulate the flow of traffic along that route
Va	luable examples of Informatory Traffic Signs:
	Tunnel Ahead
	Pedestrian Subway
	Railway Station
	Bus stop
	No Through Road
	First aid Post
	Hospital
	Place identification sign, Confirmatory sign
$\Box$	Direction sign Advance Direction sign

#### iv. The Social Responsive Involvement for the unit

	help travelling. The visua	gnizes a need for social responsiveness to relate to decision assistance signs that all information in an informatory traffic sign, helps the driver understand the ontain ance available and function for the (PIEV) abilities required in driving on a route.
	The NSSR-RS Unit 3 Score adhering to the Key Lear	ecard enables a NSSR responder to state issues or unsatisfactory experiences while ning of the unit
•	1. The Informatory Sign (	) and its Perception ability helps selection of routes/response/needful action for road safety (Tick as applicable):
•	Poor/ Fair/ Medium score/ Good	
•	2 The Informatory Traffic Sign ( (Tick as applicable):	) and its expectations of the Intelligence level helps selection of routes/response/needful action for road safety
•	Poor/ Fair/ Medium score/ Good	
•	3. The Informatory Traffic Sign (safety (Tick as applicable);	) and its expectations of the Emotional makeup/quotient helps selection of routes/response/needful action for road
•	Poor/ Fair/ Medium score/ Good	
•	4. The Informatory Traffic Sign (road safety (Tick as applicable);	) and its expectations of the Volition (Self enabled Action) level helps selection of routes/response/needful action fo
•	Poor/ Fair/ Medium score/ Good	

v. The expected Responses reported for the unit and it's enabling of road safety

These traffic signs are of the type

☐ Type 1: Directs or Gives orders

☐ Type 2: Warns

✓ Type 3: Gives information



#### As a further function

- Blue rectangles give information
- Some traffic signs have different shapes and depicted colour rules to give more prominence

Shape: Circle

Shape: Triangle

Shape: Rectangle

### As the Government of India policy that interlinks RTO(s)

Traffic signs or markings are placed alongside, at, or above a road, highway, ring road, pathway, or route to guide, inform or warn or regulate the flow of traffic along that route.

They can also give advance information about the road conditions ahead.

Traffic signs are planned and placed on routes, so drivers/commuters/road users are able to recognize the warning in them, prepare and act in time

#### vi. Complaints commonly reported for the unit

As road systems are planned with traffic signs by project departments and the RTO, they need to be monitored for expected road safety

The monitoring is done by Concerned Civic Bodies, Traffic Guides, Pollution Level Controllers and Emergency Response & Disaster Mitigation Teams for intervention, incidence mitigation and resolution

The common complaints about traffic signs and their deployments on roads and routes are whether they are of right guidance-standards, insightful for road safety, of correct quality, with expected reliability, and whether they can plan for, improve or regulate responsiveness



• <u> </u>	Reporting	g a compla	int about	accountability	y for	traffic factors
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#### i. An Introduction to the unit

#### Fatigue and drowsy driving section

As fatigue sets in during long journeys or repeated trips, the driver can become less alert or drowsy while driving. In the worst case the driver may fall asleep behind the wheel.

The self-assessment will validate whether the the driver may have slow reaction times, reduced vigilance and impaired thinking.

There are various options that can be used to test alertness via awareness of warning signs, need for adherence to norms, and even the tracking of eye movements & measurement of the length of our blinks.



#### •Similar to Drunk Driving:

•Sleep deprivation can impair driving abilities to a similar extent as alcohol consumption, making drowsy driving extremely dangerous.

#### ii. The Key Learning of the unit

Awareness of warning signs (is a part of the new self-assessment) (Public domain reference: <a href="http://www.sleepeducation.org/sleep-topics/drowsy-driving">http://www.sleepeducation.org/sleep-topics/drowsy-driving</a>)

- Yawning
- Inability to keep eyes open
- Talking incoherently or inability to respond to questions from passengers or co-drivers
- "Nodding off" and trouble keeping your head up
- Inability to remember driving the last few miles
- Ending up too close to nearby cars
- Missing road signs or turns
- Drifting into other lanes or onto rumble strips on the shoulder



#### iii. The Hazards Analysis for the unit

Drowsy driving significantly increases the risk of accidents, impairing judgment, reaction time, and coordination, mirroring the dangers of drunk driving. It can lead to crashes, injuries, and fatalities, with drowsy driving contributing to a substantial number of accidents annually.

Here's a more detailed look at the risks:

#### **Impaired Driving Abilities:**

- Slower Reaction Times:
- Drowsiness significantly slows down a driver's ability to react to hazards and changing road conditions.
- Reduced Awareness:
- Drowsy drivers may have difficulty maintaining focus and awareness of their surroundings.
- Impaired Judgment:
- Drowsiness can lead to poor decision-making, making it harder to assess risks and make safe driving choices.

#### **Impaired Driving Abilities (continued):**

- Poor Coordination:
- Drowsiness can affect a driver's ability to control the vehicle, leading to erratic steering and speed control.
- Microsleeps:
- Brief periods of unconsciousness (microsleeps) can occur while driving drowsy, causing a driver to lose control of the vehicle.
- Drifting out of Lanes:
- Fatigued drivers are more likely to drift out of their lanes due to impaired motor skills and reduced focus, increasing the risk of collision

#### **Consequences of Drowsy Driving:**

- Increased Risk of Accidents:
- Drowsy driving is a major contributor to motor vehicle collisions, leading to injuries and fatalities.
- Fatal Crashes:
- Drowsy driving can result in fatal crashes, with a significant percentage of fatal car crashes involving a drowsy driver.
- Injuries:
- Drowsy driving accidents can result in serious injuries to drivers and passengers, as well as pedestrians.
- Property Damage:
- Accidents caused by drowsy driving can result in extensive property damage to vehicles and other infrastructure.
- Economic Costs:
- Drowsy driving accidents have significant economic costs, including medical expenses, lost wages, and property damage.

#### iv. The Social Responsive Involvement for the unit

Need for adherence to norms (is a part of the new self-assessment)

(Public domain reference: <a href="http://www.sleepeducation.org/sleep-topics/drowsy-driving">http://www.sleepeducation.org/sleep-topics/drowsy-driving</a>)

- Get a full night of seven to eight hours of sleep before long journeys or when you must undertake driving
- Avoid driving late at night or at times you are known to feel sleepy
- Avoid driving alone when you feel you are most vulnerable
- On a long trip, share the driving with another co-driver
- Rolling down the windows or turning up the volume on the radio will not always increase alertness while driving.
- Pull over at a suitable rest stop and take a nap
- Use hot caffeine or tea for a short-term boost. Take a short nap after consuming caffeine or tea to maximize the effect
- For office goers, arrange for someone you know or service you can trust to give you a ride home after working a late shift
- (Proof of concept needed) Blink and record eyeball response using a mobile camera and run a test to check alertness levels



#### v. The expected Responses reported for the unit and it's enabling of road safety

Drowsy driving can affect anyone who takes the wheel, but certain people are at higher risk of crashes related to drowsy driving, including:

- People who drive for a living such as long-haul truckers or bus drivers.
- People who work long hours, irregular shifts, or night shifts.
- People with serious sleep problems including insomnia or other sleep disorders.
- Teenagers who have less driving experience and high rates of sleep insufficiency.



Responsiveness also needs relating to and working out of these issues

- **People who take Medications:** Numerous medications cause sleepiness. Sleep aids, including prescription drugs, over-the-counter medications, and dietary supplements, that are taken at night may cause lingering grogginess the next morning. Drowsiness is also a side effect of medications used for many other conditions.
- People travelling more so at particular time of the day: Auto accidents from drowsy driving occur most frequently between midnight and six a.m. or in the mid-afternoon, which are two times when sleepiness peaks

v. The expected Responses reported for the unit and it's enabling of road safety

#### **Before Driving**

- Plan ahead to limit total driving hours
- Avoid driving during the drowsiest times of day
- Budget time for rest
- Get a good night's sleep
- Avoid alcohol and other sedatives
- Bring a travel companion
- For trucks/ride operators identify parking lots to take a sleep break on long journeys
- If working night shifts or on rotating shifts, plan related sleep breaks before driving



#### vi. Complaints commonly reported for the unit

As road systems are planned with traffic signs by project departments and the RTO, they need to be monitored for expected road safety

The monitoring is done by Concerned Civic Bodies, Traffic Guides, Pollution Level Controllers and Emergency Response & Disaster Mitigation Teams for intervention, incidence mitigation and resolution

The common complaints about traffic signs and their deployments on roads and routes are whether they are of right guidance-standards, insightful for road safety, of correct quality, with expected reliability, and whether they can plan for, improve or regulate responsiveness

#### **Compounding problems adding to accident rates**

#### •Poor Infrastructure:

•Many roads in Bengaluru are in disrepair, with potholes, uneven surfaces, and lack of proper maintenance being common complaints.

#### •Traffic Congestion:

•The city experiences heavy traffic, especially during peak hours, leading to delays and frustration for commuters.

#### •Lack of Connectivity:

•Some areas lack adequate road connectivity, making it difficult to travel to certain destinations.

•	Reporting a co	mplaint about	accountability	y for traffic factors
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Road system name: Road system Id:

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- Health details: ...

- Reporting a complaint about accountability for traffic factors
- Traffic signs concern/ issues with decision assistance:

Associated images (to be uploaded in.jpeg format with details on location):

- Reporting a complaint about accountability for traffic factors
- Nature of congestion (Rated as important negative influences):
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- () Signage with precautionary and must know information about ring road, flyover, bridge, tunnel, subway, metro track, tram track, and level crossing
- () Other issues impacting unregulated driving:



### 11. Drive India NSSR-RS Unit 5 (Fog or Night Driving)

#### i. An Introduction to the unit

Fog and night driving present unique challenges to visibility and safety.

But driving in fog is generally considered more dangerous due to the reduced visibility and potential for sudden hazards.

Whereas night driving requires increased focus and awareness due to reduced light levels.

#### To drive in the fog in the night

Slow down and allow extra time to reach your destination. Make your vehicle visible to others both ahead of you and behind you by using your low-beam headlights since this means your taillights will also be on. Use fog lights if you have them. Never use your high-beam lights



### 11. Drive India NSSR-RS Unit 5 (Fog or Night Driving)

#### ii. The Key Learning of the unit

Driving in Fog

#### **Reduced Visibility:**

Fog significantly reduces visibility, making it difficult to see road signs, other vehicles, and potential hazards.

#### **Increased Risk of Accidents:**

The combination of reduced visibility and potential for sudden braking or maneuvers can lead to accidents, especially at higher speeds



**Night Driving** 

#### **Reduced Light Levels:**

Night driving involves navigating in reduced light levels, making it harder to see road signs, pedestrians, and other vehicles.

#### **Glare from Headlights:**

The headlights of other vehicles can cause glare, making it difficult to see ahead.

#### **Increased Fatigue:**

Driving at night can lead to fatigue, which can impair reaction time and judgment.

### **The Hazards Analysis for the unit**

Fog or unplanned night driving has a risk of accidents, impairing judgment, reaction time, and coordination, Here's a more detailed look at the risks:

### **Hazards in fog driving:**

Finding more difficulty in detecting obstacles or other vehicles

Impaired Judgment while driving

#### **Reduced Visibility:**

Fog significantly reduces visibility, making it harder to see road hazards, other vehicles, and pedestrians

#### **Distorted Perception:**

Fog can distort distances and make it difficult to judge speed and the position of other vehicles.

#### **Increased Accident Risk:**

 Reduced visibility and distorted perception contribute to a higher risk of accidents, especially rear-end collisions.

#### iii. The Hazards Analysis for the unit

Fog or unplanned night driving has a risk of accidents, impairing judgment, reaction time, and coordination, Here's a more detailed look at the risks:

### Hazards in fog driving (continued):

### **High Beams are Counterproductive:**

• Using high beams in fog can worsen visibility as the light reflects off the water droplets, making it harder to see.

#### **Wet Road Conditions:**

Fog often accompanies wet roads, which can lead to hydroplaning and reduced traction.

•

#### iii. The Hazards Analysis for the unit

Fog or unplanned night driving has a risk of accidents, impairing judgment, reaction time, and coordination, Here's a more detailed look at the risks:

### **Hazards in night driving:**

### **Reduced Visibility:**

Darkness limits visibility, making it harder to see road hazards, pedestrians, and other vehicles.

#### **Glare from Headlights:**

• Oncoming headlights can cause glare, making it difficult to see the road ahead.

### Fatigue:

Night driving can lead to fatigue, which can impair reaction time and judgment.

#### **Unseen Hazards:**

Potholes, debris, and other road hazards are harder to spot at night.

### iii. The Hazards Analysis for the unit

Fog or unplanned night driving has a risk of accidents, impairing judgment, reaction time, and coordination, Here's a more detailed look at the risks:

### Hazards in night driving (continued):

#### **Poorly Lit Areas:**

Poorly lit areas can hide pedestrians and cyclists, increasing the risk of accidents.

#### **Impaired Vision:**

• Night vision can be impaired by fatigue, age, or other factors, making it harder to see clearly.

#### **Distraction:**

Drivers may become distracted by their phones, passengers, or other activities at night.

### iv. The Social Responsive Involvement for the unit

### **Fog Driving**

- Visibility: Use low-beam headlights, as high beams can reflect off the fog and worsen visibility.
- **Speed:** Reduce your speed and increase your following distance to have more time to react to changing conditions.
- **Distractions:** Avoid distractions like cell phones or music, and keep your windows and mirrors clean.
- Avoidance: Do not overtake other vehicles, and avoid sudden braking or maneuvers.
- Visibility: Ensure your tail lights and blinkers are working and visible.
- Fog Lights: If your car has fog lights, use them to improve visibility.
- Windshield: Use warm air conditioning to clear any mist on your windshield.
- Horn: Blow your horn repeatedly, especially when changing lanes or approaching turns.
- **Pull Over:** If visibility is extremely poor, pull over to a safe location and wait for conditions to improve.

### iv. The Social Responsive Involvement for the unit

### **Night Driving**

- Visibility:
- Use low-beam headlights, and ensure your headlights and taillights are clean and working properly.
- Fatigue:
- Avoid driving when you are tired or drowsy. If you feel tired, pull over to a safe location and rest.
- Distractions:
- Avoid distractions like cell phones or music, and keep your windows and mirrors clean.
- Pedestrians and Cyclists:
- Be extra vigilant for pedestrians and cyclists, as they can be harder to see at night.
- Speed:
- Reduce your speed and increase your following distance to have more time to react to changing conditions.

### iv. The Social Responsive Involvement for the unit

**Night Driving (continued)** 

- Roadside Assistance:
- Ensure you have roadside assistance contact information readily available.
- Emergency Kit:
- Prepare an emergency kit with essentials like a flashlight, first-aid kit, and reflective "triangles or social-responsibility-notifications (like vehicle under repair, or vehicle breakdown)".
- High Beams:
- Use high beams cautiously, especially in areas with oncoming traffic, as they can blind other drivers.
- Animals:
- Be aware of animals that may be crossing the road, especially in rural areas

- v. The expected Responses reported for the unit and it's enabling of road safety Specific Safety Tips for driving in fog
- Slow Down: Reduce speed to a safe and controlled level, allowing ample time to react to potential hazards.
- Maintain a Safe Following Distance: Increase the distance between your vehicle and the vehicle in front to allow for more time to react and stop.
- Use Low Beams: Use low-beam headlights for optimal visibility in foggy conditions.
- Avoid Overtaking: Overtaking in fog is extremely dangerous due to reduced visibility and the potential for sudden hazards.
- **Pull Over if Necessary:** If the fog becomes too dense, find a safe spot off the road to pull over and wait for conditions to improve.
- Use Fog Lights (If Equipped): If your vehicle has fog lights, use them in addition to low beams to improve visibility.
- Keep Windshield and Windows Clean: Ensure that your windshield and windows are clean and free of
  moisture to maintain visibility

- v. The expected Responses reported for the unit and it's enabling of road safety Specific Safety Tips for driving at night
- Use Headlights: Ensure that your headlights are clean and properly adjusted.
- Adjust Speed to Conditions: Reduce speed to a safe level, considering the lighting conditions and potential hazards.
- **Be Aware of Glare:** Be aware of the potential for glare from other vehicles and adjust your speed and position accordingly.
- Take Breaks: If you are driving long distances at night, take regular breaks to rest and stay alert.
- **Avoid Distractions:** Refrain from using your phone or engaging in other distracting activities while driving at night.
- Use Fog Lights (If Equipped): If your vehicle has fog lights, use them in addition to low beams to improve visibility in foggy conditions

### vi. Complaints commonly reported for the unit

As road systems are planned with traffic signs by project departments and the RTO, they need to be monitored for expected road safety

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#### **Compounding problems adding to accident rates**

#### •Poor Infrastructure:

•Many roads in Bengaluru are in disrepair, with potholes, uneven surfaces, and lack of proper maintenance being common complaints. Some have reduced or unregulated low visibility levels.

#### Traffic Congestion:

•The city experiences heavy traffic, especially during peak hours, leading to delays and frustration for commuters.

#### •Lack of Connectivity:

•Some areas lack adequate road connectivity, making it difficult to travel to certain destinations.

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- () Other issues impacting unregulated driving/driving in poor visibility:



### i. An Introduction to the unit

A responsive road system, or "smart roads," utilizes a Road Infrastructure Transformation (RIT) Framework to sense its surroundings, monitor conditions, and proactively adapt to traffic and environmental changes, aiming for efficient and safe transportation.

NSSR-RS Unit 6, its Value addition and transformation programmes for the Government's vision, highlights of which are as follows

- □ Addressing infrastructure needs
- □On-road waste / climate change impacting resource assessment, planning and management (where this is termed as impact on the economy,, ecology and environment)
- ☐ Safe and smarter commuting
- □ Commissioning of strategic road infrastructure and road systems as indicated in the next page

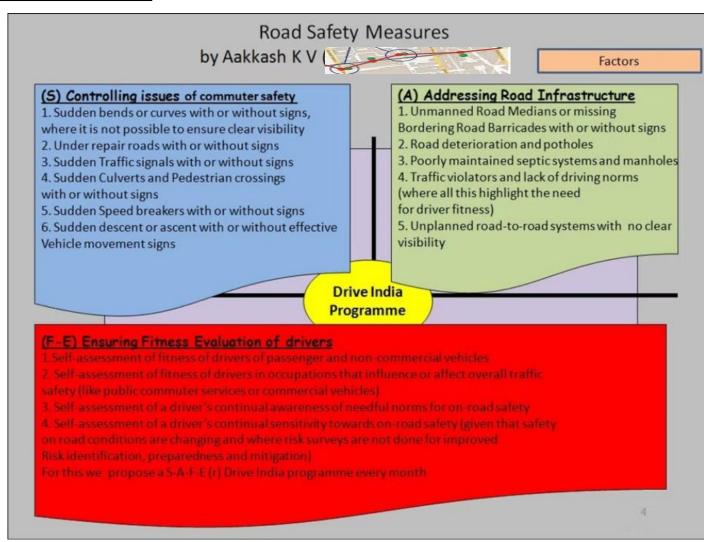
### i. An Introduction to the unit

Commissioning of strategic road infrastructure and road systems such as
□Express ways, NICE roads
□Border roads
□Flyovers
□Bridges
□Underpasses
☐Link roads, road corridors
☐Ring roads

### i. An Introduction to the unit

Commissioning of strategic road infrastructure and road systems such as
☐Futuristic Cable cars
☐Futuristic Rope ways
☐Current road amenities such as EV charging stations and Flexi-fuel pumps
☐Futuristic road amenities such as Heli-ports, Drone-ports
□WIP road amenities such as Service Centre USHD(s) with UAV or Drone-ports for Augmented RADIUS of
coverage of the management index/the catalog synergy of connected road systems
□USHD: Universal (RIT-CS) Showcase Help Desks with UAV or Drone ports to incorporate road system imagery into the safe and smart commuting reasoning of the vehicle owner or driver

ii. The Key Learning of the unit



### ii. The Key Learning of the unit

The NSSR-RS Unit 5 focuses on Time Motion Scale (TMS) Studies and Transformation Programmes Via

- (1) Practices for Ease of Access to traffic
- (2) Practices for Ease of Providing traffic control services
- (3) Strategic analytics for improved Road Systems with Traffic Police Stations on them
- (4) Strategic analytics for improved Traffic Control Police Safety

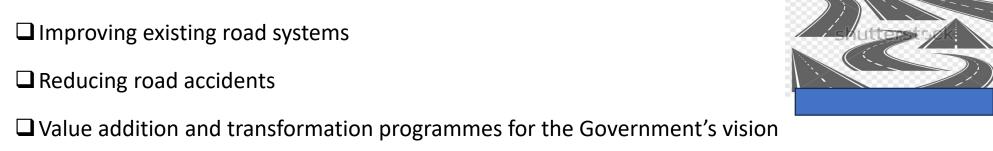
### ii. The Key Learning of the unit

<del></del>				
The NSSR-RS Unit 5 summarizes that Traffic Control-programme-outcome issues have been attributed to				
☐Growing need for more Traffic Control-programme resources				
□Lack of Proactive emphasis for the dynamics seen by the Traffic Control Programme-enabling departments for the following:				
$\square$ Government driven appreciation of environmental system dynamics and/or safer traffic control & commuting				
☐Project Management of the environmental conditions for Traffic Control				
□Nature of ownership for degradation of environmental conditions and climate change				
☐ Transformative investments in RIT organization structure and human resources				
□NEXT steps for sustainable improvisations in traffic control				
□NEXT Steps Reflection about the millennium goals for health and wellness of the Traffic Control workforce				
□Nature of ownership for millennium goals for the health and wellness of the traffic control workforce				

### iii. The Hazards Analysis for the unit

A Sustainable, responsive and innovative focus for road infrastructure milestones involves

☐ Constructing new road systems



The NSSR-RS Unit 6 proposes Fast Tracked SMART Resolution for a RADIUS of Coverage of a road system, with the help of a Management Index Specification for a road system and a RITP-Catalog System. The RITP-CS proposes the inception of a SMART Ward Field Book for urban locations and a SMART Grid Field Book for semi-urban or rural or unmanaged locations. The handbook only focuses on road safety, thereon helps people, drivers, commuters or road system users to provide feedback for the responsiveness needed from the Government/Authorities for road system transformation.

Every road has certain MIR assets and certain MIR liabilities, where MIR assets help road system utilization and performance, whereas MIR liabilities are always or sometimes hazardous if not suitable for a road configuration or can pose a risk to people using a road system.

The MIR specification terms the following as **MIR assets** 

- 1. Road configuration databases and/or cloud based systems
- 2. Traffic signals and traffic control systems
- 3. Disaster mitigation systems and Emergency Response systems
- 4. Defect liability based feedback systems
- 5. Planned Road signs, Billboards/Hoardings, Signages
- 6. RITP-CS specific Augmented RADIUS of coverage KPI(s) (WIP)





The MIR specification terms the following as MIR liabilities

- 1. Unplanned Lanes, Road Medians
- 2. Unplanned Bordering Road Barricades
- 3. Unplanned Speed breakers or Road Humps
- 4. Unplanned or poorly constructed Pavements
- 5. Poorly maintained Manholes & Sewer systems
- 6. Impediment causing Elevated or Tube Railway infrastructure
- 7. Unmanned or poorly maintained Railway crossings
- 8. Poorly maintained Bridges and Tunnels\*
- 9. Poorly maintained Trees and Greenery
- 10. Hotspots (locations that need converged administration to address the need to mitigate climate change, rising pollution levels, rising CO2 levels, poor air quality, accident trends, traffic problems, incidences of crime, issues with road system arboriculture)
- 11. No RITP evaluations to minimize RADIUS OF COVERAGE inefficiencies





• The MIR specification tries to balance MIR liabilities with MIR assets. To do this the specification introduces a new principle called "RADIUS OF COVERAGE augmentation" and "defect liability", where the nature of planning, implementation, commissioning, performance and SMART Resolution, maintenance and/or reengineering are all evaluated via the need to perform reliably, effectively for route assurance for a specific radius of coverage, improve safety and mitigate hazard or risk.

Further said, the new idea - MIR specification uses the following core indicators and systems to define a road system configuration

- 1. Nature of planning
- 2. Defect liability systems
- 3. Associated planning, risk mitigation, repair and/or restoration programmes
- 4. Traffic management systems
- 5. ACCIDENT RELIEF, EMERGENCY RESPONSE AND ASSISTANCE systems
- 6. Twin System Viewpoint Management for RITP-CS indicators

In NSSR-RS UNIT 6, focus is given to gathering information for Accident Relief, Emergency Response and Assistance.

### iii. The Hazards Analysis for the uni

As implementing the MIR specification will need big sized budgets that depend upon the RADIUS of coverage, the city's landscape planning & development, the diversity of it's road systems, the multi-varieties of the traffic and commuting differentiations, the proposal emphasizes that the civic bodies can plan for responses and/or feedback from people, drivers, commuters or road system users. for incorporating Road Infrastructure

Transformation Programme-Catalog Synergy (RITP-CS) as in the first editioning, by improving road system resilience.

The resilience of a road network indicates the continued

functionality of a road system for any evaluated

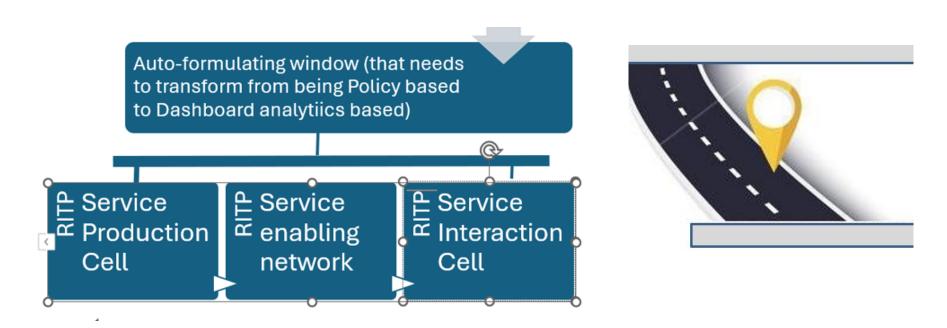
magnitude and consequences of a disruption



#### v. The expected Responses reported for the unit and it's enabling of road safety

The enabling of road safety is possible through a Knowledge Upkeep for a road system, transfer of learning reports, case studies and NSSR-RS-design of ticketing for road system responsiveness.

The ticketing system will help Service Anywhere Anytime solutions, and on-road process accountability to help road safety and service analytics.



#### vi. Complaints commonly reported for the unit

As road systems are planned with traffic signs by project departments and the RTO, they need to be monitored for expected road safety

The monitoring is done by Concerned Civic Bodies, Traffic Guides, Pollution Level Controllers and Emergency Response & Disaster Mitigation Teams for intervention, incidence mitigation and resolution

The common complaints about traffic signs and their deployments on roads and routes are whether they are of right guidance-standards, insightful for road safety, of correct quality, with expected reliability, and whether they can plan for, improve or regulate responsiveness

#### **Compounding problems adding to accident rates**

#### •Poor Infrastructure:

•Many roads in Bengaluru are in disrepair, with potholes, uneven surfaces, and lack of proper maintenance being common complaints. Some have reduced or unregulated low visibility levels.

### Traffic Congestion:

•The city experiences heavy traffic, especially during peak hours, leading to delays and frustration for commuters.

### •Lack of Connectivity and/or on-road process accountability:

•Some areas lack adequate road connectivity, making it difficult to travel to certain destinations.

### Some road systems need improved PIEV\* which stands for

 Perception time, Intellection time, Emotion time, Volition (Final action) time and proposed RITP Catalog Synergy time

### vi. Complaints commonly reported for the unit

- Summarising an explanation for PIEV
- PIEV Perception time, Intellection time, Emotion time, Volition (Final action) time
- Perception time time required to perceive a situation or object
- Intellection time time required to compare different thoughts, regroup thoughts and different points of understanding, register new "information, thoughts or sensations"
- Emotion time time required to compare "emotional responses, sensations or disturbances"
- Volition time time required for final action
- Proposed RITP-Catalog Synergy (RITP-CS) time time required to evaluate RITP-CS Management for a RADIUS OF COVERAGE
- PIEV\* time required depends upon aspects such as
- 1. Physical characteristics of the driver
- 2. Psychological factors influencing or affecting the driver, <u>savings & safety interests</u>
- 3. Environmental conditions, influencers, situations, <u>road & traffic health</u>
- 4. Purpose of trip, trip planning,
- 5. Type and speed of vehicle, condition and adherence to norms
- 6. New Votary specification and choices for traffic health
- 7. (Occupation based or Trends based) Self-assessment for fitness, drive guidance
- 8. <u>Availability of feedback systems</u> 9. <u>Editioning of RITP-CS</u>

Reporting a complaint about accountability for traffic factors

• Road system name: Road system Id:

• Date of submission: Time of submission:

Mapping from:

Mapped till:

Mapping pending:

• Type of road system: Road/Stretch/Route/Ring road /Highway

• Type of transportation that uses road system: Public transport/Private transport/Pooled transport/Personal transport/Priority transport

Added commuting systems: Overhead Metro/Underground Subway/Tram

• Current Risk Health: DIL incorporation/Acceptable driving conditions/Other reports/Do not know

Health details: ...

- Reporting a complaint about accountability for traffic factors
- Traffic signs concern/ issues with road system:

Associated images (to be uploaded in.jpeg format with details on location):

- Reporting a complaint about accountability for traffic factors
- The Deep Interaction Link (label or tag, in addition to deployments like a traffic sign) for a road system is to be based on the Juran Trilogy of implementing
- ☐ KPI(s) for Quality Planning,
- ☐ KPI(s) for Quality Control and
- □ KPI(s) for Quality Improvement to manage the cost of poor quality or quality recognition and vehicle fitness enablers for vehicle suitability for voice of the commuter factors, and global & mutually beneficial attributes for the road system responsiveness, we expect in the future.



The DIL label or tag for a road system is work in progress with the authorities being invited for decision making.

- Reporting a complaint about accountability for traffic factors
- Nature of congestion (Rated as important negative influences):
- () Perennial congestion
- () Seasonal congestion
- () Time-based congestion
- () Incidence specific congestion
- () Feeder Traffic specific congestion
- () Goods/Freight movement specific congestion
- () Congestion due to other influences / conditional dynamics

### Impact on ☐ Sustainable Development & Growth ☐ Socio Economic Solutions ☐ Traffic Control ☐ Supply chaining ☐ TMS Logistics Environmental quality ☐ Incidence Response / Mitigation ☐ Fire fighting (amenity specific) / Fire Department response

- Reporting a complaint about accountability for traffic factors
- Required Signage deployed to mitigate risks to commuters or people
- () Road signs identifying traffic safety norms (signage about sharp curves, bends, gradients, narrowing, low visibility zone, low height clearance and load levels)
- () Signage for accident relief, emergency response and assistance (like contact information for the nearest "ambulance services, hospital, police station, fire department, disaster management department", associated civic body)
- () Signage and barricades around (perimeter) of potholes, poor quality manholes and septic systems
- () Signage with precautionary and must know information about ring road, flyover, bridge, tunnel, subway, metro track, tram track, and level crossing
- () Other issues impacting unregulated driving/track report:

**NSSR-RS-Id:** 

Date of report:	Time of report:
( ) Quality levels	
Details: For example "Good/Moderate/Poor/Hazardous" with	added details
( ) Traffic volume levels Details: For example " <b>Heavy/Moderate/Low volume/Controlle</b>	ed" with added details
( ) Pollution levels Details: For example " <b>High/Moderate/Normal/Uncontrolled"</b> v	with added details
( ) Accidents or incidence (even crimes) trends  Details: For example "High/Moderate/Rare/Controlled" with a	dded details
( ) Possible route diversions Details: For example "Arterial arrangement/Alternate deviation added details	ns/Service roads/Flyovers/Recommended by intervention diversions" with
( ) Commuter comfort levels (specific to Commuter profile)	
Details: For example "High volume related stress levels/Moder	rate volume related stress levels/Normal volume related stress

levels/Uncontrolled volume related stress levels/Repair work related stress levels/Breakdown of vehicles related stress levels/Ambulance or Emergency Response or Special need vehicles related stress levels/Climate change related stress levels/Disaster conditions related stress levels/Escalated tension related stress levels..." with added details

### 11. Drive India NSSR-RS Unit 6 (Road System responsiveness)

( ) Availability of alternate transportation services
Details: For example "Overhead Metro/Underground Subway/Tram" with added details

A Votary Track is a Road System that is being reported about for NSSR-RS responsiveness

( ) Availability of emergency response services

Details: For example "Equipped with first aid provisions/Has clearance for air lift/Equipped with fire extinguishers/Equipped with smoke alarm systems/Equipped with sentinel sensors" with added details

( ) Afflicted due to weather forecasts

Details: For example "Harsh weather conditions, high ambient temperatures, poor quality of air, low visibility levels, high speed wind velocity, heavy rainfall leading to flood like situations, water logging, overflowing of sewage drains" with added details

( ) Vital network and signal coverage

Details: For example "Normal Votary Track connectivity/Failing Votary Track connectivity/Problematic Votary Track connectivity/Normal Emergency Response connectivity/ Failing Emergency Response connectivity/ Problematic Emergency Response connectivity/Good quality signal strength reported for most mobile services/Complaints recorded for most mobile services/Poor quality signal strength due to weather forecasts" with added details

( ) Vehicle indicators

Details: For example "Normal for road system configuration/ Problematic for road system configuration/
Problematic for unmapped road system configuration/Complaints recorded for road system configuration" with added details

### 11. Drive India NSSR-RS Unit 6 (Road System responsiveness) – Proposed Ticketing system

### IMPORTANT DETAILS FOR ROAD SYSTEM RESPONSIVENESS

NSSR-RS Ticket Id: DIP-RSM-Email Id/Whatsapp		Source: NSSR-RS-HANDBOOK/DESK	
NSSR-RS Id:			
Ticket status: Open/Closed/Escalated/Needs details/Not available			
Date of submission:	Time of submission:		
Road system name:	Road system Id:		
Problems faced for reasons such as: ( ) Quality levels ( ) Traffic volume levels ( ) Pollution levels			
<ul><li>( ) Accidents or incidence (even crimes) trends</li><li>( ) Possible route diversions</li></ul>			
<ul> <li>( ) Impacted Commuter comfort levels (specific to Commuter profile) ( ) Non-availability of alternate transportation services</li> <li>( ) Non-availability of emergency response services ( ) Non-availability of drive guidance services</li> <li>( ) Afflicted due to weather forecasts</li> <li>( ) Faulty vital network and signal coverage</li> <li>( ) Vehicle indicators (problems related to Commuter Health and Lifespan Dynamics)</li> </ul>			

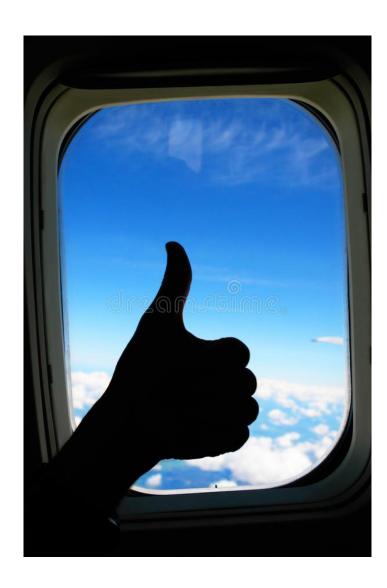
## 11. Drive India NSSR-RS Unit 6 (Road System responsiveness) – Proposed Ticketing system

( )	Management of (negative influence specific) Key indicators
[]	Nature of congestion [ ] Probable Hazards
[]	Lack of Signage deployment ( ) Repair or restoration
[]	Interpretations on Fuel consumption
[]	Lack of support for renewable energy or battery powered vehicles
( )	Sustainable infrastructure (positive influence specific) Key indicators
[]	Stabilizing aspects
[]	Planning behind repair or restoration [ ] Signage and barricade deployment
[]	Traffic management advisory
	Pedestrian and Commuter safety [ ] Associated Traffic Management
	Accident relief, Emergency response and assistance
De	tails of problems faced:

**Resolution sought:** 



RoadMIR and RoadKPI framework



### i. An Introduction to the unit

Driving condition responsiveness refers to how quickly and appropriately a driver reacts to changing road and traffic conditions. This includes their reaction time to hazards, their ability to maintain control of the vehicle, and their decision-making processes in varying scenarios. Factors like stress, fatigue, and driver ability can significantly impact this responsiveness.

### **Key Aspects of Responsiveness**

Reaction Time
Control over the vehicle
Sensitized or Effective Decision-making

### **Key Factors affecting Responsiveness**

Driver Ability/Anticipatory Guidance
Driver Stress
Driver Alertness / Fatigue
Road and Traffic conditions

### ii. The Key Learning of the unit

To develop more driving-condition-responsiveness in automobile brands, the universal & NSSR expectations in automobile brands for improving road safety are important.

The key contributors for driving-condition-responsiveness are
 □ Improved sales & marketing, service operations and process efficiency
 □ Connected & Responsive Quality of service enablers by the dealer network or independent automobile businesses
 □ New BI & CQI led Deep Interaction (DIL) links for a Service Centre's "RADIUS OF COVERAGE", "Road Safety Liability with Responsive Resolution" for dynamics seen in Road System understanding and Alpha Assistance
 □ Key opinion led nutshell inventory, parts management and disposal for a Service Centre's "RADIUS OF COVERAGE", "Road Safety Liability with Responsive Resolution"

### 12. AUTOMOBILE BRAND EQUITY ESSENTIALS

### **Meaning of Market Penetration for**

Market penetration is a measure of how much a product or service is being used by target customers compared to the total estimated market for that product or service.

Market penetration also relates to the number of potential customers that have purchased a specific company's product instead of a competitor's product.

Market penetration is a *measure of the reach and sales of a* brand, product, or service within an existing market.

# Brand Equity and its Sensitized responsiveness for Driver Fitness Vehicle Fitness Road system understanding Alpha Assistance Twin Timeline Monitors Unifying insight based .Value addition

### **Key contributors for brand equity are:**

Year 2025: Sensitized responsiveness with frameworks such as

- a. Design for dealership performance
- b. Connected & Responsive Quality of service enablers
- c. New BI & CQI led Deep Interaction (DIL) links
- d. Improved sales & marketing, service operations and process efficiency
- e. Key opinion led nutshell inventory, parts management and disposal
- f. Key opinion led management of demand and supply
- g. Key opinion led Sustainable development and growth

AOEC has designed a Planner, Ownership demystifier Guide and Calendar for 2025

### 12. RESPONSIVENESS EVALUATED FOR AUTOMOBILE BRANDS

- Customer engagement
- Understanding of customer needs & benefit analysis
- Responsive dealership and service management
- Analysis of Functional Safety or crash worthiness of vehicles in context of accidental repairs or incidence evaluation
- Effectively coordinating dealership, service-operations, systems and processes to sell the existing and upcoming models
- Deploying a Unifying-Hub-Profile, Scorecard and Unifying-Showcase-Help-Desk (USHD) to implement all of the above and accentuate the brand



Unifying-Hub-Profile



**Unifying Showcase** 

### 12. Dealership/Showroom responsiveness

- Improved Customer engagement
- Improved First Contact data recording
- Improved Vehicle Sheet/Details Information
- Effectively coordinating QCD (<u>Quality, Cost and Delivery</u> Management) for dealership, service-operations, systems and processes
- Analytics of
- Responsive CRM based data recording/analysis
- Basal Pain point specific Management Accounting
- Unifying-Hub-Profile driven value addition and brand equity development

Climate Health like
Air quality
Wind speed
Temperature
Cloudiness
Responsive Viewpoints
Incidence/Emergency/
Disaster Viewpoints

### 12. Service Centre/Workshop responsiveness

- CRM dashboard of dealer's experience (part of the Unifying-Hub-producer model)
- Basal spare parts management experience (part of the Unifying-Hub-producer-consumer model)
- Unifying-Hub-Profile based Scorecard of experience for the responsiveness theory (part of the emerging sense and respond dynamics and sensitization)

### iii. The Hazards Analysis for the unit:

Driving in dusty road conditions
Driving in road systems degraded by salt/corrosive toxins/ emissions
Driving in the condition of inflowing dust/sand/ water
Driving in mountainous areas
Towing related driving conditions
Driving in afflicted conditions (like low fuel or undue contingency or contaminated fuel, degraded
parts, poor or damaged head lights,)
Driving in frequent stop and start conditions or brake affected conditions
Driving in sunroof affected conditions
Driving in wiper, or windshield affected conditions
Driving in dealer-network-affected conditions
Driving in Emergency Services affected conditions
Driving in out-of-network-coverage conditions
Driving in reverse gear specifically conditions
Driving in journey parameter affected conditions
Driving in non-showcased conditions

### iv. The Social Responsive Involvement for the unit

### Workflow adherence for the incorporation of

- A CRM dashboard of customer's vehicle experience (part of the Unifying-Hub-consumer model)
- A CRM dashboard of customer's easy ownership experience (part of the Unifying-Hub-consumer model)
- Voluntary Crashworthiness and safety analysis with accidental repairs or incidence evaluation

Formats of the same are in the APPENDIX

### 12. Drive India NSSR-RS Unit 7 (Driving conditions responsiveness) v. The expected Responses reported for the unit and it's enabling of road safety

- As maintenance is mostly a reactive strategy for a vehicle or fleet owned by a customer, we find certain aspects are important such as
- (a) Predicting of remaining useful lifetimes of vehicles and their parts/components
- (b) Assessing the effect of remaining useful lifetimes on the cost of repairs or replacements
- (c) Considerations of the safety of using a vehicle whose parts/components need periodic maintenance
- (d) Optimization of the maintenance schedule of the fleet to support objectives such as assessing
- (1) Degradation in the performance of suspension and springs
- (2) Degradation of brake pads
- (3) Degradation of tyres
- (4) Degradation of chassis and it's expected condition
- (5) Degradation of the manual gear system or automatic transmission
- (6) Degradation in vehicle's ingress protection from dust and water

### vi. Complaints commonly reported for the unit

As road systems are planned with traffic signs by project departments and the RTO, they need to be monitored for expected road safety

The monitoring is done by Concerned Civic Bodies, Traffic Guides, Pollution Level Controllers and Emergency Response & Disaster Mitigation Teams for intervention, incidence mitigation and resolution

The common complaints about traffic signs and their deployments on roads and routes are whether they are of right guidance-standards, insightful for road safety, of correct quality, with expected reliability, and whether they can plan for, improve or regulate responsiveness

### **Compounding problems adding to accident rates**

### •Poor Infrastructure:

•Many roads in Bengaluru are in disrepair, with potholes, uneven surfaces, and lack of proper maintenance being common complaints. Some have reduced or unregulated low visibility levels.

### Traffic Congestion:

•The city experiences heavy traffic, especially during peak hours, leading to delays and frustration for commuters.

### •Lack of Connectivity:

•Some areas lack adequate road connectivity, making it difficult to travel to certain destinations.

Reporting a complaint about accountability for traffic factors

Road system name: Road system Id:

Date of submission:

Time of submission:

Mapping from:

Mapped till:

Mapping pending:

• Type of road system: Road/Stretch/Route/Ring road /Highway

• Type of transportation that uses road system: Public transport/Private transport/Pooled transport/Personal transport/Priority transport

• Added commuting systems: Overhead Metro/Underground Subway/Tram

• Current Risk Health: Assisting signs satisfactory/Acceptable driving conditions/Other reports/Do not know

Health details: ...

- Reporting a complaint about accountability for traffic factors
- Traffic signs concern/ issues with driving in poor conditions:

• Associated images (to be uploaded in.jpeg format with details on location):

- Reporting a complaint about accountability for traffic factors
- Nature of congestion (Rated as important negative influences):
- () Perennial congestion
- () Seasonal congestion
- () Time-based congestion
- () Incidence specific congestion
- () Feeder Traffic specific congestion
- () Goods/Freight movement specific congestion
- () Congestion due to other influences / conditional dynamics

### Impact on ☐ Sustainable Development & Growth ☐ Socio Economic Solutions ☐ Traffic Control ☐ Supply chaining ☐ TMS Logistics Environmental quality ☐ Incidence Response / Mitigation ☐ Fire fighting (amenity specific) / Fire Department response

- Reporting a complaint about accountability for traffic factors
- Required Signage deployed to mitigate risks to commuters or people
- () Road signs identifying traffic safety norms (signage about sharp curves, bends, gradients, narrowing, low visibility zone, low height clearance and load levels)
- () Signage for accident relief, emergency response and assistance (like contact information for the nearest "ambulance services, hospital, police station, fire department, disaster management department", associated civic body)
- () Signage and barricades around (perimeter) of potholes, poor quality manholes and septic systems
- () Signage with precautionary and must know information about ring road, flyover, bridge, tunnel, subway, metro track, tram track, and level crossing
- () Other issues impacting unregulated driving/track report:

### 12. Drive India NSSR-RS Unit 7 (Driving conditions responsiveness) - Proposed Track report

**NSSR-RS-Id:** 

Date of report:	Time of report:
( ) Quality levels	
Details: For example "Good/Moderate/Poor/Hazardous" with added details	
( ) Traffic volume levels Details: For example <b>"Heavy/Moderate/Low volume/Controlled"</b> with added details	
( ) Pollution levels  Details: For example "High/Moderate/Normal/Uncontrolled" with added details	
( ) Accidents or incidence (even crimes) trends  Details: For example "High/Moderate/Rare/Controlled" with added details	
( ) Possible route diversions Details: For example <b>"Arterial arrangement/Alternate deviations/Service roads/Flyovers</b> added details	:/Recommended by intervention diversions" with
( ) Commuter comfort levels (specific to Commuter profile)	
Details: For example "High volume related stress levels/Moderate volume related stress	levels/Normal volume related stress

levels/Uncontrolled volume related stress levels/Repair work related stress levels/Breakdown of vehicles related stress levels/Ambulance or Emergency Response or Special need vehicles related stress levels/Climate change related stress levels/Disaster conditions related stress levels/Escalated tension related stress levels..." with added details

### 12. Drive India NSSR-RS Unit 7 (Driving conditions responsiveness) - Proposed Track report

( ) Availability of alternate transportation services  Details: For example "Overhead Metro/Underground Subway/Tram" with added details	A Votary Track is a Road System that is being reported about for NSSR-RS responsiveness	
( ) Availability of emergency response services Details: For example "Equipped with first aid provisions/Has clearance for air lift/Equipped smoke alarm systems/Equipped with sentinel sensors" with added details		
( ) Afflicted due to weather forecasts Details: For example "Harsh weather conditions, high ambient temperatures, poor qualit velocity, heavy rainfall leading to flood like situations, water logging, overflowing of sew	•	
( ) Vital network and signal coverage Details: For example "Normal Votary Track connectivity/Failing Votary Track connectivity Normal Emergency Response connectivity/ Failing Emergency Response connectivity/ Pr Emergency Response connectivity/Good quality signal strength reported for most mobil services/Complaints recorded for most mobile services/Poor quality signal strength due forecasts" with added details	oblematic e	
( ) Vehicle indicators		

Problematic for unmapped road system configuration/Complaints recorded for road system configuration" with added details

Details: For example "Normal for road system configuration/ Problematic for road system configuration/

### 12. Drive India NSSR-RS Unit 7 (Driving conditions responsiveness) – Proposed Ticketing system

### IMPORTANT DETAILS FOR ROAD SYSTEM RESPONSIVENESS

NSSR-RS Ticket Id: DIP-RSM-Email Id/Whatsapp		Source: NSSR-RS-HANDBOOK/DESK		
NSSR-RS Id:				
Ticket status: Open/Closed/Escalated/Needs details/Not available				
Date of submission:	Time of submission:			
Road system name:	Road system Id:			
Problems faced for reasons such as: ( ) Quality levels ( ) Traffic volume levels ( ) Pollution levels				
<ul><li>( ) Accidents or incidence (even crimes) trends</li><li>( ) Possible route diversions</li></ul>				
<ul> <li>( ) Impacted Commuter comfort levels (specific to Commuter profile) ( ) Non-availability of alternate transportation services</li> <li>( ) Non-availability of emergency response services ( ) Non-availability of drive guidance services</li> <li>( ) Afflicted due to weather forecasts</li> <li>( ) Faulty vital network and signal coverage</li> <li>( ) Vehicle indicators (problems related to Commuter Health and Lifespan Dynamics)</li> </ul>				

# 12. Drive India NSSR-RS Unit 7 (Driving conditions responsiveness) – Proposed Ticketing system

( ) Management of (negative influ	uence specific) Key indicators
[] Nature of congestion [] Proba	ble Hazards
[ ] Lack of Signage deployment ( )	Repair or restoration
[ ] Interpretations on Fuel consum	notion
• • •	energy or battery powered vehicles
	<i>,</i> , ,
( ) Sustainable infrastructure (no	sitive influence specific) Key indicators
[ ] Stabilizing aspects	stive influence specific Rey findicators
	oration [ ] Signage and barricade deploymer
	1, 0, 0
[ ] Traffic management advisory	ty [ ] Associated Traffic Management
( ) Accident relief, Emergency resp	,
( ) Accident renei, Emergency resp	Jonise and assistance
Data Harris Caralla and Caralla	
Details of problems faced:	

**Resolution sought:** 



RoadMIR and RoadKPI framework



### i. An Introduction to the unit

### What is First-Aid?

Measures to be taken immediately after an accident not with the idea to cure, or to replace services offered by the medical community but to prevent further harm from happening.

### Main objectives of First-Aid

- (1) Protect and preserve life
- (2) Prevent afflicted person's condition from worsening
- (3) Promote well-being and recovery

### ii. The Key Learning of the unit

### **Goals of First-Aid**

- (1) The immediate priority being to restore and maintain the vital functions of the injured person via certain steps for basic life support
- (a) Ensuring the AIRWAY is open so that the injured person's body gets a proper supply of oxygen
- (b) Enabling and ensuring BREATHING so that oxygen passes through lungs into the blood stream
- (c) Helping and ensuring CIRCULATION where there must be circulation of blood to all parts of the body, so that there is sufficient supply of blood and oxygen
- (d) First aid assistance on-road is more related to losing consciousness or fainting, burns or vehicle fire incidences, electrocution, bleeding from cuts, wounds, and injuries, fracture symptoms, unforeseen poisoning incidences, preparation and equipping of a first aid knit in vehicles

### iv. The Social Responsive Involvement for the unit

### **Simple 5 step Action Plan**

It is necessary to check if the injured has any life-threatening conditions, where the plan of action includes the following steps:

- (a) Check for further DANGER at location or spot, if so, then move the injured person away carefully
- (b) Check for RESPONSE, shake gently, if conscious check for injuries
- (c) Check AIRWAYs to see if they are blocked, clear any loose material in mouth
- (d) Check for BREATHING by looking for chest rise and fall, or by listening to breathing sounds, or by feeling breath on cheeks or hand. If there is no breathing, roll injured person on back with face upwards. Tilt head. Loosen and separate jaws to open airway. Give mouth to mouth resuscitation.

If there is breathing, place injured person in stable position (sometimes a stable side position is preferred) and check for injuries.

(e) Check CIRCULATION, feel pulse in groove beside Adam's apple.

If there is a pulse, if needed perform mouth to mouth breathing For children: 20 breaths per minute by puffing and blowing gently For adults: 12 to 15 breaths per minute by blowing fully

If there is no pulse, perform Cardio Pulmonary Resuscitation (CPR). As this needs skill and training, ensure one who is trained does this.

v. The expected Responses reported for the unit and it's enabling of road safety

### (A) Fainting or losing consciousness

- Loss of consciousness in times of disasters has many causes associated with it i.e.
- (1) Trauma caused by severe distress
- (2) Fainting on account of fatigue or lack of oxygen
- (3) Head injury, spinal cord injury

### First-Aid (Do's)

- 1. Under circumstances, prevent person from falling
- 2. Lay the person on back facing upwards
- 3. Tilt head back
- 4. Keep arms at right angles to body
- 5. Raise legs 8-12 inches to promote blood flow to brain
- 6. Pinch the person gently to check for response
- 7. Examine body for injuries
- 8. Keep a record of condition of person to help medical assistance

v. The expected Responses reported for the unit and it's enabling of road safety

### (A) (Continued) Fainting or losing consciousness First-Aid (Do not's)

- 1. Do not crowd around the injured person
- 2. Do not allow the person to get up and move around immediately on regaining consciousness
- 3. Do not give water or juice to the person as soon as he or she regains consciousness

### (B) Bleeding from cuts, wounds or punctures First-Aid (Do's)

- 1. Wear gloves (if possible) while attending to the injured person
- 2. Try to stop bleeding by elevating injured part or by applying pressure. Handle
- with care if fracture is suspected
- 3. Bandage the injured area to stop bleeding and to prevent infection of wound
- 4. Give a tetanus injection if required
- 5. If the injured person loses consciousness, apply 5 step Action Plan

v. The expected Responses reported for the unit and it's enabling of road safety

### (C) Burns

- First-Aid (Do's)
- 1. Wrap with blankets or non-inflammable material to put off fire
- 2. Wear gloves (if possible) while attending to the injured person
- 3. Cool the burn immediately apply cloth soaked in cool water for at least 5 minutes till pain subsides
- 4. Cover the burn cover the burnt area with dry sterile gauge bandage but do
- not use cotton or any other fluffy material
- 5. Give an over-the-counter pain reliever
- 6. Take off clothes or jewelry covering burn area before swelling or blisters appear

### • First-Aid (Do not's)

- Do not remove cloth stuck to burn area
- 2. Do not wash burn area under extreme water pressure
- 3. Do not apply oil or ice on affected area
- 4. Do not attempt to puncture or break blisters

- v. The expected Responses reported for the unit and it's enabling of road safety
- (D) Electrocution First-Aid (Do's)
- 1. Cut off the power supply
- 2. Move the person away from source or spot using a non-conductive material
- 3. Check for breathing, carry out **5 step Action Plan** or **CPR** as needed
- 4. Cover the affected area with a clean dressing
- 5. Arrange for further medical assistance as needed

### First-Aid (Do not's)

- 1. Do not touch or attempt to move person without shutting off power supply
- 2. Do not move person away from spot without making arrangements for non-conductive material to help do this
- 3. While attending to person do not touch any non-insulated wire

v. The expected Responses reported for the unit and it's enabling of road safety

### (E) Fractures Symptoms

- 1. Check for pain at or near site of injury (which increases with movement)
- 2. Check gently if movement is possible (if there is a fracture, movement will be difficult, not possible or painful)
- 3. Check for swelling around injured part, where later there may be bruising or discoloration
- 4. Check for deformity at site of fracture
- 5. Check if injured person is in a state of shock

### First-Aid (Do's)

- 1. If there is bleeding, control bleeding before immobilizing site of fracture
- 2. Immobilize site of fracture
- 3. Check if injured person is in a state of shock
- 4. Revive the injured person using 5 step Action Plan
- 5. Place ice-pack on affected area to reduce pain and swelling
- 6. Provide proper padding to affected area before shifting to hospital etc

- v. The expected Responses reported for the unit and it's enabling of road safety
- (E) (Continued) Fractures First-Aid (Do not's)
- 1. Do not move the injured person without support
- 2. Do not ask injured person to move independently
- 3. Do not move joints above or below the site of fracture
- 4. Do not massage the affected area
- 5. Do not force bones back into the wound

### Remember the principles of RICE

- 1. REST- Give rest to injured person and injured part
- 2. ICE- Apply ice on injured part
- 3. COMPRESS Wrap the injured area with crepe bandage
- 4. ELEVATE Elevate injured area above level of heart

- v. The expected Responses reported for the unit and it's enabling of road safety
- (F) Poisoning Types of poisoning
- (1) Ingested poisons (orally)
- (2) Inhaled poisons (through lungs by inhaling industrial gases, flames from fire, chemical vapors etc)
- (3) Absorbed poisons (through skin via contact with poisonous sprays)

### Signs and symptoms

- 1. Bluish lips
- 2. Difficulty in breathing, chest pain
- 3. Cough
- 4. Abdominal pain, loose motions
- Dizziness
- 6. Double vision
- 7. Confusion
- 8. Fever

v. The expected Responses reported for the unit and it's enabling of road safety

### (F) (Continued) Poisoning

- First-Aid (Do's)
- 1. Check airway, breathing and circulation, proceed with 5-step Action Plan
- 2. Check for foreign matter in mouth, if found remove immediately
- 3. Prevent injured person from entering a state of shock
- 4. Dilute poison by giving milk or water
- Observer color and amount of vomit
- 6. Monitor vital signs
- 7. Arrange for immediate medical assistance
- First-Aid (Do not's)
- 1. Do not induce vomiting unless type of poisoning known
- 2. Do not panic

- v. The expected Responses reported for the unit and it's enabling of road safety
- First-Aid Kit

### (A) Medicinal items

- 1. Antiseptics, disinfectants
- 2. Antihistamine cream
- 3. Tube of petroleum jelly
- 4. Analgesics, Pain relievers
- Paracetamol
- 6. Antacid
- 7. Life saving drugs, Oral Rehydration solution (ORS) packets
- 8. Anti-diarrhoea medication

### (B) Bandages

- 1. Sterile dressing, cotton wool, adhesives,
- 2. Triangular bandages, band-aids
- 3. Crepe bandages

4. Make-shift stretchers, crutches, splints

v. The expected Responses reported for the unit and it's enabling of road safety

### (Continued) First-Aid Kit

### (C) Other items

- 1. Thermometer
- 2. Sterilized gloves, Latex gloves
- 3. Towels, napkins
- 4. Assorted sizes of safety pins
- 5. Tweezers, needles, syringes, trays
- 6. Anti-germicidal soaps, cleansing soaps
- 7. Scissors
- 8. Torches
- 9. Disposable bags, garbage bags

v. The expected Responses reported for the unit and it's enabling of road safety

### **Added notes:**

Fire safety risk assessment: 5-step checklist (accessible)

- Fire hazards.
- People at risk.
- Evaluate and act.
- Record, plan and train.
- Review.

### **Important Considerations:**

- •Fuel System Leaks:
- •Leaks in the fuel system are a common cause of vehicle fires, so it's crucial to address them quickly.
- •Time is of the Essence:
- •Prompt action is essential for both drivers and first responders to minimize the damage and risks associated with vehicle fires.

### What is the basic principle of fire safety?

Identifying and eliminating potential sources of ignition is crucial in preventing fires.

Common sources include faulty electrical wiring, open flames, or overheated machinery.

Ensuring proper maintenance and inspection can significantly reduce these risks.

v. The expected Responses reported for the unit and it's enabling of road safety

### Added notes:

On-road responsiveness to vehicle fires involves immediate actions like stopping safely, turning off the engine, and calling for help.

Firefighters prioritize blocking and safe vehicle positioning to ensure their safety and

effective fire suppression. Knowing your vehicle's bonnet catch location and how to use an extinguisher can be crucial for tackling a small engine fire.

v. The expected Responses reported for the unit and it's enabling of road safety

### Added notes:

### For Drivers:

- 1. Safety First: Pull over to a safe location, away from traffic, and turn off the engine.
- **2. Call for Help:** Immediately contact emergency services to report the fire.
- **3.** If a small engine fire: Know where your bonnet catch is, and if it's safe to lift the bonnet, you can try using an extinguisher. Otherwise, stay away and let professionals handle it.
- 4. Stay Safe: Don't try to fight a large fire yourself. Focus on getting to safety and waiting for help.
- **5. Engage Emergency Brake:** Help prevent the vehicle from rolling, especially if the fire has affected the brakes

v. The expected Responses reported for the unit and it's enabling of road safety

### Added notes:

### For First Responders (Firefighters)::

### 1. 1. Safe Positioning:

2. Prioritize safe and secure positioning for fire apparatus and personnel, considering uphill and upwind locations.

### 3. 2. High Visibility:

4. Firefighters should wear retro-reflective material during fire suppression and high visibility garments when not directly exposed to fire.

### 5. 3. Distance:

6. Maintain a safe distance from the burning vehicle.

### 7. 4. Fire Suppression:

8. Firefighters will use various techniques to extinguish the fire, potentially including using water, foam, or other extinguishing agents.

### vi. Complaints commonly reported for the unit

As road systems are planned with traffic signs by project departments and the RTO, they need to be monitored for expected road safety

The monitoring is done by Concerned Civic Bodies, Traffic Guides, Pollution Level Controllers and Emergency Response & Disaster Mitigation Teams for intervention, incidence mitigation and resolution

The common complaints about traffic signs and their deployments on roads and routes are whether they are of right guidance-standards, insightful for road safety, of correct quality, with expected reliability, and whether they can plan for, improve or regulate responsiveness

### **Compounding problems adding to accident rates**

### •Poor Infrastructure:

•Many roads in Bengaluru are in disrepair, with potholes, uneven surfaces, and lack of proper maintenance being common complaints. Some have reduced or unregulated low visibility levels.

### Traffic Congestion:

•The city experiences heavy traffic, especially during peak hours, leading to delays and frustration for commuters.

### •Lack of Connectivity:

•Some areas lack adequate road connectivity, making it difficult to travel to certain destinations, or avail of immediate first aid assistance or fire safety remedial assistance.

Reporting a complaint about accountability for traffic factors

Road system name: Road system Id:

• Date of submission: Time of submission:

Mapping from:

Mapped till:

Mapping pending:

• Type of road system: Road/Stretch/Route/Ring road /Highway

Type of transportation that uses road system: Public transport/Private transport/Pooled transport/Personal transport/Priority transport

• Added commuting systems: Overhead Metro/Underground Subway/Tram

• Current Risk Health: Assisting signs satisfactory/Acceptable driving conditions/Other reports/Do not know

Health details: ...

- Reporting a complaint about accountability for traffic factors
- Traffic signs concern/ issues with first aid assistance or fire safety responsiveness:

• Associated images (to be uploaded in.jpeg format with details on location):

- Reporting a complaint about accountability for traffic factors
- Nature of congestion (Rated as important negative influences):
- () Perennial congestion
- () Seasonal congestion
- () Time-based congestion
- () Incidence specific congestion
- () Feeder Traffic specific congestion
- () Goods/Freight movement specific congestion
- () Congestion due to other influences / conditional dynamics

### Impact on ☐ Sustainable Development & Growth ☐ Socio Economic Solutions ☐ Traffic Control ☐ Supply chaining ☐ TMS Logistics Environmental quality ☐ Incidence Response / Mitigation ☐ Fire fighting (amenity specific) / Fire Department response

- Reporting a complaint about accountability for traffic factors
- Required Signage deployed to mitigate risks to commuters or people
- () Road signs identifying traffic safety norms (signage about sharp curves, bends, gradients, narrowing, low visibility zone, low height clearance and load levels)
- () Signage for accident relief, emergency response and assistance (like contact information for the nearest "ambulance services, hospital, police station, fire department, disaster management department", associated civic body)
- () Signage and barricades around (perimeter) of potholes, poor quality manholes and septic systems
- () Signage with precautionary and must know information about ring road, flyover, bridge, tunnel, subway, metro track, tram track, and level crossing
- () Other issues impacting unregulated driving/track report:

### 13. Drive India NSSR-RS Unit 8 (First Aid and Fire Safety responsiveness) - Proposed Track report

**NSSR-RS-Id:** 

Date of report:	Time of report:
( ) Quality levels	
Details: For example "Good/Moderate/Poor/Hazardous" with added details	
( ) Traffic volume levels Details: For example <b>"Heavy/Moderate/Low volume/Controlled"</b> with added details	
( ) Pollution levels  Details: For example "High/Moderate/Normal/Uncontrolled" with added details	
( ) Accidents or incidence (even crimes) trends Details: For example "High/Moderate/Rare/Controlled" with added details	
( ) Possible route diversions  Details: For example "Arterial arrangement/Alternate deviations/Service roads/Flyovers, added details	/Recommended by intervention diversions" with
) Commuter comfort levels (specific to Commuter profile)	
Details: For example "High volume related stress levels/Moderate volume related stress	levels/Normal volume related stress

levels/Uncontrolled volume related stress levels/Repair work related stress levels/Breakdown of vehicles related stress levels/Ambulance or Emergency Response or Special need vehicles related stress levels/Climate change related stress levels/Disaster conditions related stress levels/Escalated tension related stress levels..." with added details

### 13. Drive India NSSR-RS Unit 8 (First Aid and Fire Safety responsiveness) - Proposed Track report

( ) Availability of alternate transportation services
Details: For example "Overhead Metro/Underground Subway/Tram" with added details

A Votary Track is a Road System that is being reported about for NSSR-RS responsiveness

( ) Availability of emergency response services

Details: For example "Equipped with first aid provisions/Has clearance for air lift/Equipped with fire extinguishers/Equipped with smoke alarm systems/Equipped with sentinel sensors" with added details

( ) Afflicted due to weather forecasts

Details: For example "Harsh weather conditions, high ambient temperatures, poor quality of air, low visibility levels, high speed wind velocity, heavy rainfall leading to flood like situations, water logging, overflowing of sewage drains" with added details

( ) Vital network and signal coverage

Details: For example "Normal Votary Track connectivity/Failing Votary Track connectivity/Problematic Votary Track connectivity/
Normal Emergency Response connectivity/ Failing Emergency Response connectivity/ Problematic
Emergency Response connectivity/Good quality signal strength reported for most mobile
services/Complaints recorded for most mobile services/Poor quality signal strength due to weather
forecasts" With added details

( ) Vehicle indicators

Details: For example "Normal for road system configuration/ Problematic for road system configuration/
Problematic for unmapped road system configuration/Complaints recorded for road system configuration" with added details

### 13. Drive India NSSR-RS Unit 8 (First Aid and Fire Safety responsiveness) – Proposed Ticketing system

### IMPORTANT DETAILS FOR ROAD SYSTEM RESPONSIVENESS

NSSR-RS Ticket Id: DIP-RSM-Email Id/Whatsapp Source: NSSR-RS-HANDBO		Source: NSSR-RS-HANDBOOK/DESK
NSSR-RS Id:		
Ticket status: Open/Closed/Escalated/Needs	details/Not available	
Date of submission:	Time of submission:	
Road system name:	Road system Id:	
Problems faced for reasons such as: ( ) Quality levels ( ) Traffic volume levels ( ) Pollution levels		
<ul><li>( ) Accidents or incidence (even crimes) trer</li><li>( ) Possible route diversions</li></ul>	nds	
<ul> <li>( ) Non-availability of emergency response s</li> <li>( ) Afflicted due to weather forecasts</li> <li>( ) Faulty vital network and signal coverage</li> </ul>	cific to Commuter profile) ( ) Non-availability of altection of altection of the commuter profile) ( ) Non-availability of drive guidance services ( ) Non-availability of drive guidance services	·
) Vehicle indicators (problems related to Commuter Health and Lifespan Dynamics)		

## 13. Drive India NSSR-RS Unit 8 (First Aid and Fire Safety responsiveness) – Proposed Ticketing system

( )	Management of (negative influence specific) Key indicators
[]	Nature of congestion [ ] Probable Hazards
[]	Lack of Signage deployment ( ) Repair or restoration
[]	Interpretations on Fuel consumption
[]	Lack of support for renewable energy or battery powered vehicles
()	Sustainable infrastructure (positive influence specific) Key indicators
	Stabilizing aspects
[]	Planning behind repair or restoration [ ] Signage and barricade deployment
[]	Traffic management advisory
[]	Pedestrian and Commuter safety [ ] Associated Traffic Management
( )	Accident relief, Emergency response and assistance



RoadMIR and RoadKPI framework

**Resolution sought:** 

**Details of problems faced:** 



### i. Introduction for the unit

- The afflicted person is affected by personal limitations or differences in the ability to do things like a normally able person.
- In this condition, the person can be helped by assistive systems that instrument/improve
- Learning ability
- Training ability
- Self-developed ability/reasoning/competency
- Continual ownership to be innovative, accountable, and self-managed to mitigate common-for-affliction
  impact and setback with or without benchmarked role model or Six sigma assistance level specific Physically
  Assistive Infrastructure, Physically Assistive Technology/Systems/ Equipment/Products/Processes or Digitally
  Assistive Infrastructure Technology/Systems/ Equipment/ Products/Processes, Alpha Assistance (Help)
  Cards/Processes/Desks

### ii. The Key Learning of the unit

- The person with or without any affliction needs to learn or incorporate responsiveness to deal with limitations that affect the ability to do things or work with productivity/skills/competence.
- It is recommended to subscribe to or develop a NSSR-RS Unit specific programme and project that helps Alpha Assistive solutions for people while travelling, where the focus could be on the following:.

☐ Alpha Assistive System for brain impairment	
☐ Alpha Assistive System for vision impairment	
☐ Alpha Assistive System for speech impairment	
☐ Alpha Assistive System for hearing impairment	
☐ Alpha Assistive System for multiple sense organ impairment	
☐ Strategy for coping up (for example a NSSR-RS Alpha Assistance (Help) Card/Process/Desk)	

### iii. The Hazards Analysis for the unit

A Sustainable, responsive and innovative focus for road infrastructure milestones involves

- ☐ Constructing new road systems
- ☐ Improving existing road systems
- ☐ Reducing road accidents and helping the adversely impacted
- ☐ Value addition and transformation programmes for the Government's vision



The NSSR-RS Unit 6 proposes Fast Tracked SMART Resolution for a RADIUS of Coverage of a road system, with the help of a Management Index Specification for a road system and a RITP-Catalog System. The RITP-CS proposes the inception of a SMART Ward Field Book for urban locations and a SMART Grid Field Book for semi-urban or rural or unmanaged locations. The handbook only focuses on road safety, thereon helps people, drivers, commuters or road system users to provide feedback for the responsiveness needed from the Government/Authorities for road system transformation and a concern called Alpha Assistance for the adversely impacted who could be travelling with regular people.

iii. The Hazards Analysis for the uni

The NSSR-RS Unit wise proposal emphasizes that the civic bodies can plan for responses and/or feedback from people, drivers, commuters or road system users. for incorporating Road Infrastructure Transformation Programme-Catalog Synergy (RITP-CS) as in the first editioning, by improving road system resilience.

The resilience of a road network indicates the continued

functionality of a road system for any evaluated

magnitude and consequences of a disruption.

The expectation of whether it helps Alpha Assistance

Responsiveness is not yet a policy of the resilience of the

Road system.

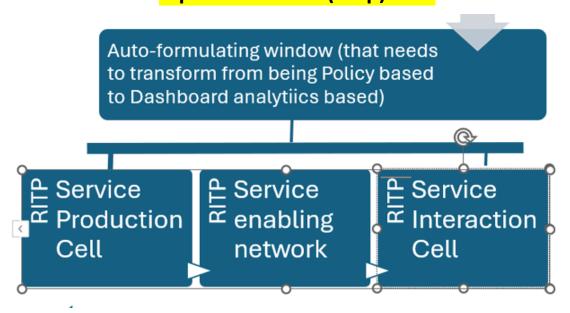


### v. The expected Responses reported for the unit and it's enabling of road safety

The enabling of road safety is possible through a Knowledge Upkeep for a road system, transfer of learning reports, case studies and NSSR-RS-design of ticketing for road system responsiveness.

The ticketing system will help Service Anywhere Anytime solutions, and on-road process accountability to help road safety, assistance enablers and service analytics.

### Alpha Assistance (Help) Card







**PHOTO** 

Date: Version:

Name: Age: Gender:

Type of impairment (Tick as applicable): Brain/Vision/Hearing/Speech/Multiple sense organs/Handicapped

**Address:** 

### Landmark to locate address:

Name of contactable parent/guardian:

Phone/Mobile:

Name of contactable caretaker:

Phone/Mobile:

**Emergency contact for (any on-road incidence):** 

Phone/Mobile:

**PHOTO** 

Date: **Version:** 

Name: Age: **Gender:** 

Alpha Assistance Processes (factors to be considered):

1. Perception ability for help/response/needful action (Tick as applicable):

Poor/ Fair/ Medium score/ Good

2. Intelligence level for help/response/needful action (Tick as applicable):

Poor/ Fair/ Medium score/ Good

3. Emotional makeup/quotient for help/response/needful action (Tick as applicable);

Poor/ Fair/ Medium score/ Good

4. Volition (Self enabled Action) level for help/response/needful action (Tick as applicable);

Poor/ Fair/ Medium score/ Good



**PHOTO** 

Alpha Assistance (Help) Card

Date: **Version:** 

Name: **Gender:** Age:

**Languages understood: Sign Language:** 

**Interpretation for scores:** 

PIEV Ability	Poor	Fair	Medium	Good
Self awareness	x	٧	٧	٧
Social interaction	x	٧	٧	٧
Response to new/ unmanaged environment / Weather conditions	x	x	x	<b>√</b>
Recognition level for people/vehicle/immediate kin/ co-passengers	x	x	<b>√</b>	<b>√</b>
Led by available assistance and instruction	x	٧	x	٧
Led by peer / mirrored behaviour	V	٧	٧	٧
Led by known person's communication	٧	V	٧	<b>v</b> 166



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Date:	Version:

Name: Age: Gender:

### Alpha Assistance Processes (needed):

### 1. Assistance procedure in Emergency (Tick as applicable):

Ask me/ Refer Help Card/ Call parent/guardian/ Call contact/ Contact Alpha Assistance Desk

### 2. Assistance procedure in Vehicle Breakdown (Tick as applicable):

Ask me/ Refer Help Card/ Call parent/guardian/ Call contact/ Contact Alpha Assistance Desk

### 3. Assistance procedure in Due Relief for any situation (Tick as applicable):

Ask me/ Refer Help Card/ Call parent/guardian/ Call contact/ Contact Alpha Assistance Desk

### 4. Assistance via Alpha Assistance Desk (Tick as applicable):

Responsive to instructions/ Trained to respond/Under training/Not under training/Cannot be trained

**PHOTO** 

Alpha Assistance (Help) Card

Date: **Version:** 

**Gender:** Name: Age:

**Additional Alpha Assistance Processes (notes):** 





**Alpha Assistance (Help) Card** 

Date: Version:

Name: Age: Gender:

Alpha Assistance Desk (notes):

Registered (Tick as applicable): Yes/No/Not applicable

**Expectation for PIEV Ability (Tick as applicable):** 

Self-ability/Responsive/Needs Guidance/Needs Careful interaction/ Not known

**Trained for PIEV Ability (Tick as applicable):** 

Via Self-development programmes/Via Family Services/ Via Awareness & Advocacy programmes/ Not trained

Part of any Alpha Assistance R&D Project (Tick as applicable):

Yes/No/Not applicable

Details:

Has a Deep Interaction Link (DIL) for Alpha Assistance (Tick as applicable):

Yes/No/Not applicable

**Details:** 

**PHOTO** 

Alpha Assistance (H	elp	) Card
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Date: **Version:** 

**Gender:** Name: Age:

**Additional Alpha Assistance Desk (notes):** 

### vi. Complaints commonly reported for the unit

As road systems are planned with traffic signs by project departments and the RTO, they need to be monitored for expected road safety

The monitoring is done by Concerned Civic Bodies, Traffic Guides, Pollution Level Controllers and Emergency Response & Disaster Mitigation Teams for intervention, incidence mitigation and resolution

The common complaints about traffic signs and their deployments on roads and routes are whether they are of right guidance-standards, insightful for road safety, of correct quality, with expected reliability, and whether they can plan for, improve or regulate responsiveness

### **Compounding problems adding to accident rates**

### •Poor Infrastructure:

•Many roads in Bengaluru are in disrepair, with potholes, uneven surfaces, and lack of proper maintenance being common complaints. Some have reduced or unregulated low visibility levels.

### Traffic Congestion:

•The city experiences heavy traffic, especially during peak hours, leading to delays and frustration for commuters.

### •Lack of Connectivity and/or on-road process accountability:

•Some areas lack adequate road connectivity, making it difficult to travel to certain destinations.

### Some road systems need improved PIEV\* which stands for

 Perception time, Intellection time, Emotion time, Volition (Final action) time and proposed RITP Catalog Synergy time

### vi. Complaints commonly reported for the unit

- Summarising an explanation for PIEV
- PIEV Perception time, Intellection time, Emotion time, Volition (Final action) time
- Perception time time required to perceive a situation or object
- Intellection time time required to compare different thoughts, regroup thoughts and different points of understanding, register new "information, thoughts or sensations"
- Emotion time time required to compare "emotional responses, sensations or disturbances"
- Volition time time required for final action
- Proposed RITP-Catalog Synergy (RITP-CS) time time required to evaluate RITP-CS Management for a RADIUS OF COVERAGE
- PIEV\* time required depends upon aspects such as
- 1. Physical characteristics of the driver
- 2. Psychological factors influencing or affecting the driver, <u>savings & safety interests</u>
- 3. Environmental conditions, influencers, situations, <u>road & traffic health</u>
- 4. Purpose of trip, trip planning,
- 5. Type and speed of vehicle, <u>condition and adherence to norms</u>
- 6. New Votary specification and choices for traffic health
- 7. (Occupation based or Trends based) Self-assessment for fitness, drive guidance. Alpha system responsiveness
- 8. <u>Availability of feedback systems</u> 9. <u>Editioning of RITP-CS</u>

Reporting a complaint about accountability for traffic factors and assistance for incidence mitigation

•	Road system name:	Road system Id:
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- Date of submission: Time of submission:
- Mapping from:
- Mapped till:
- Mapping pending:
- Type of road system: Road/Stretch/Route/Ring road /Highway
- Type of transportation that uses road system: Public transport/Private transport/Pooled transport/Personal transport/Priority transport
- Added commuting systems: Overhead Metro/Underground Subway/Tram
- Current Risk Health: DIL incorporation/Acceptable incidence mitigation/Other reports/Do not know
- ALPHA ASSISTANCE HELP CARD ID:
- Health details: ...

- Reporting a complaint about accountability for traffic factors and assistance for incidence mitigation
- Traffic signs concern/incidence mitigation issues with road system:

• Associated images (to be uploaded in.jpeg format with details on location):

- Reporting a complaint about accountability for traffic factors and assistance for incidence mitigation
- The Deep Interaction Link (label or tag, in addition to deployments like a traffic sign) for a road system is to be based on the Juran Trilogy of implementing
- ☐ KPI(s) for Incidence Mitigation/Alpha Assistance Responsiveness,
- ☐ KPI(s) for Quality Control and
- □ KPI(s) for Quality Improvement to manage the cost of poor quality or incidence assistance recognition and vehicle fitness enablers for vehicle suitability for voice of the commuter factors, and global & mutually beneficial attributes for the road system responsiveness, we expect in the future.



The DIL label or tag for a road system is work in progress with the authorities being invited for decision making.

- Reporting a complaint about accountability for traffic factors and assistance for incidence mitigation
- Nature of congestion (Rated as important negative influences):
- () Perennial congestion
- () Seasonal congestion
- () Time-based congestion
- () Incidence specific congestion
- () Feeder Traffic specific congestion
- () Goods/Freight movement specific congestion
- () Congestion due to other influences / conditional dynamics



- Reporting a complaint about accountability for traffic factors and assistance for incidence mitigation
- Required Signage deployed to mitigate risks to commuters or people
- () Road signs identifying traffic safety norms (signage about sharp curves, bends, gradients, narrowing, low visibility zone, low height clearance and load levels)
- () Signage for accident relief, emergency response and assistance (like must-use-Alpha Assistance Help cards, contact information for the nearest "ambulance services, hospital, police station, fire department, disaster management department", associated civic body)
- () Signage and barricades around (perimeter) of potholes, poor quality manholes and septic systems
- () Signage with precautionary and must know information about ring road, flyover, bridge, tunnel, subway, metro track, tram track, and level crossing
- () Other issues impacting unregulated driving/track report:

**NSSR-RS-Id:** 

Date of report:	Time of report:
( ) Quality levels	
Details: For example "Good/Moderate/Poor/Hazardous" with added details	
( ) Traffic volume levels  Details: For example "Heavy/Moderate/Low volume/Controlled" with added details	
( ) Pollution levels Details: For example "High/Moderate/Normal/Uncontrolled" with added details	
( ) Accidents or incidence (even crimes) trends  Details: For example "High/Moderate/Rare/Controlled" with added details	
( ) Possible route diversions  Details: For example "Arterial arrangement/Alternate deviations/Service roads/Flyove added details	ers/Recommended by intervention diversions" with
( ) Commuter comfort levels (specific to Commuter profile)	
Details: For example "High volume related stress levels/Moderate volume related stre	ess levels/Normal volume related stress

levels/Uncontrolled volume related stress levels/Repair work related stress levels/Breakdown of vehicles related stress levels/Ambulance or Emergency Response or Special need vehicles related stress levels/Climate change related stress levels/Disaster conditions related stress levels/Escalated tension related stress levels..." with added details

### 14. Drive India NSSR-RS Unit 9 (Alpha Assistance

responsiveness)

( ) Availability of alternate transportation services
Details: For example "Overhead Metro/Underground Subway/Tram" with added details

A Votary Track is a Road System that is being reported about for NSSR-RS responsiveness

( ) Availability of emergency response services/assistance for incidence mitigation

Details: For example "Equipped with first aid provisions/Has clearance for air lift/Equipped with fire extinguishers/Equipped with smoke alarm systems/Equipped with sentinel sensors" with added details

( ) Afflicted due to weather forecasts

Details: For example "Harsh weather conditions, high ambient temperatures, poor quality of air, low visibility levels, high speed wind velocity, heavy rainfall leading to flood like situations, water logging, overflowing of sewage drains" with added details

( ) Vital network and signal coverage

Details: For example "Normal Votary Track connectivity/Failing Votary Track connectivity/Problematic Votary Track connectivity/Normal Emergency Response connectivity/ Failing Emergency Response connectivity/ Problematic Emergency Response connectivity/Good quality signal strength reported for most mobile services/Complaints recorded for most mobile services/Poor quality signal strength due to weather forecasts" with added details

( ) Vehicle indicators

Details: For example "Normal for road system configuration/ Problematic for road system configuration/
Problematic for unmapped road system configuration/Complaints recorded for road system configuration" with added details

### 14. Drive India NSSR-RS Unit 9 (Alpha Assistance responsiveness) – Proposed Ticketing system

### **IMPORTANT DETAILS FOR ROAD SYSTEM RESPONSIVENESS**

NSSR-RS Ticket Id: DIP-RSM-Email Id/Whatsapp		Source: NSSR-RS-HANDBOOK/DESK		
NSSR-RS Id:	ALPHA ASSISTANCE HELP	CARD ID:		
Ticket status: Open/Closed/Escalated/Needs details/Not available				
Date of submission:	Time of submission:			
Road system name:	Road system Id:			
Problems faced for reasons such as: ( ) Quality levels ( ) Traffic volume levels ( ) Pollution levels				
<ul><li>( ) Accidents or incidence (even crimes) trends</li><li>( ) Possible route diversions</li></ul>				
	cific to Commuter profile) () Non-availability of alternate services () Non-availability of drive guidance / alpha assistant	•		

## 14. Drive India NSSR-RS Unit 9 (Alpha Assistance responsiveness) – Proposed Ticketing system

( )	Management of (negative influence specific) Key indicators	
[]	Nature of congestion [ ] Probable Hazards	
[]	Lack of Signage deployment ( ) Repair or restoration	
r 1	Interpretations on Fuel consumption	
	Lack of support for renewable energy or battery powered vehicles	
	- and the state of	
( )	Sustainable infrastructure (positive influence specific) Key indicators	
	Stabilizing aspects	
	Planning behind repair or restoration [ ] Signage and barricade deployment	
	Traffic management advisory	
[]	Pedestrian and Commuter safety [ ] Associated Traffic Management	
٠,	Accident relief, Emergency response and assistance	
( )	Apha commuter response and assistance	
Details of problems faced:		



RoadMIR and RoadKPI framework

Resolution sought:



### Road Safety Health Card (Front)

The card includes Dial-in numbers and summary for

Multiple sense organs impairment:

(a) A family doctor or physician
(b) A preferred hospital or nursing home
(c) Medical history related hospital, nursing home, medical practitioner
(d) Preferred First-aid or emergency services
(e) Health and wellness (status, tick as applicable)
[] Normal [] Afflicted [] Treated and Recovered [] Recovering
(f) Details of any issues/illness/ailment (complete as applicable):
(g) Details of any alpha-assistance as a commuter:
Visual impairment:
Speech impairment:
Heating impairment:

### Road Safety Health Card (Back)

The card includes a series of self-declarations if the card is for a person who is a driver of a vehicle

- ☐ Self-declaration on whether the responder is not a traffic rules or norms violator: Yes/No/Not applicable
- ☐ Self-declaration on whether the responder will pay fines for violations: Yes/No/Not applicable
- ☐ Self-declaration on whether the responder would like to control air pollution and fuel consumption: Yes/No/Not applicable
- □ Self-declaration on whether the responder will adopt norms or follow recommendations to control air pollution and fuel consumption: Yes/No/Not applicable
- □ **Disclaimer:** As social responsibility, social etiquette and commuter behaviour determine the response to incidences affecting an individual, the information available in the Road Safety Health-Card can only universally reduce risk and facilitate decision making.





Work in progress with stakeholder reviews being requested