





## Environmental Impact Assessment

**SMART** climate change assessment services focus on evaluating the impact of different management concepts that align with sustainable development and growth objectives, ensuring long-term social wellness and environmental sustainability

# Road safety and Concerning Conditions for the Year/Season

- Certificate of Excellence YES / NO / NOT SATISFACTORY
- Traffic issues or incidences YES / NO / NOT SATISFACTORY
- Compliance with FMVSS standard YES / NO / NOT SATISFACTORY
- Onboarding of NSSR Road Safety object YES / NO / NOT SATISFACTORY
- Upgradability of NSSR Road Infrastructure object YES / NO / NOT SATISFACTORY
- Traffic Engineering Assets planning ~~YES~~ / ~~NO~~ / NOT SATISFACTORY
- Traffic Engineering Defects Liability ~~YES~~ / ~~NO~~ / NOT SATISFACTORY
- Improved on-road assistance ~~YES~~ / ~~NO~~ / NOT SATISFACTORY
- Cost of Quality /Cost of Poor-Quality Project Assistance YES / NO / NOT SATISFACTORY
- Complexity for Road Safety and Accountability ~~YES~~ / ~~NO~~ / NOT SATISFACTORY

WHEN TRAFFIC SIGNALS AND ROAD LIGHTING ARE NOT FUNCTIONAL



STRATEGIC PLANNING



TACTICAL PLANNING

OPERATIONAL PLANNING



COPQ-SMART CITY MODEL CONTRACT SERVICES

Season: Summer / Spring/ Monsoon/ Winter

# ***ROAD SAFETY/SUPPORT EXPECTED ENABLERS***

**Essential 1: Most drivers need to be mindful of the following**



WHEN TRAFFIC SIGNALS AND  
ROAD LIGHTING IS  
FUNCTIONAL

ROAD SAFETY AND  
CONCERNING  
CONDITIONS FOR A  
DRIVER



Glare



Simulated

WHEN TRAFFIC SIGNALS AND  
ROAD LIGHTING ARE NOT  
FUNCTIONAL

NEEDING TO BE VISIBLE

NEEDING TO BE COLOR CODED

NEEDING TO BE RIGHT FOR  
ROAD SAFETY LEVEL



## Why Safety Signage?

Essential 2: SAFETY SIGNAGE  
WHEN TRAFFIC SIGNALS AND  
ROAD LIGHTING ARE NOT  
FUNCTIONAL

UNDONE WORK?  
BAD WEATHER ISSUES?



# Why Safety Signage?



WHEN TRAFFIC SIGNALS AND ROAD LIGHTING ARE NOT FUNCTIONAL

UNDONE WORK?  
BAD WEATHER ISSUES?



**Why  
Safety  
Signage?**



WHEN TRAFFIC SIGNALS AND  
ROAD LIGHTING ARE NOT  
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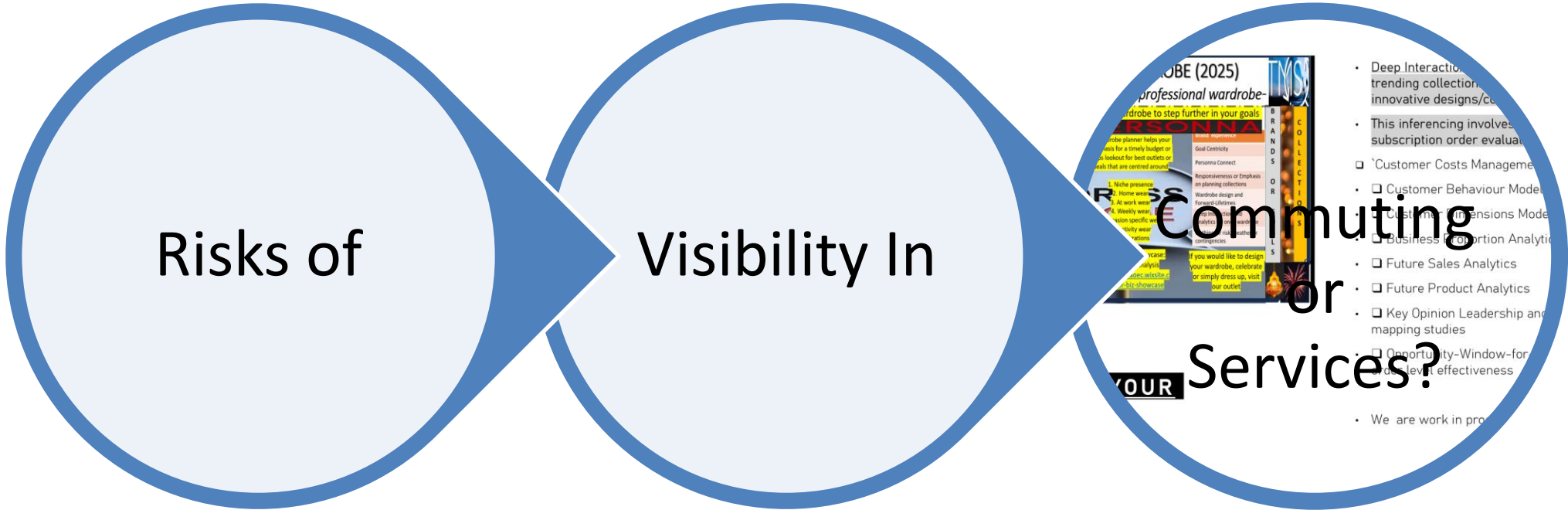


# ***ROAD SAFETY/SUPPORT EXPECTED ENABLERS***

## **Essential 5: Most drivers need to be mindful of the following**

- Yawning
- Inability to keep eyes open
- Talking incoherently or inability to respond to questions from assisting team co-drivers
- “Nodding off” and trouble keeping your head up
- Inability to remember driving the last few laps/kilometers
- Ending up too close to nearby cars
- Missing route/road system/road signs or guided turns
- Drifting into other lanes or onto rumble strips
- Inability to visualize traffic or interpret traffic signs from the line of sight distance
- Inability to visualize traffic due to blinding light sensitivity from the line of sight distance
- Inability to see people or service assisting staff from the line of sight distance or in blinding sudden-ness or closer nearness

# QUALITY PROMOTION? OR COMMUTER ENABLING?



13 REGULATIONS: ENABLING AN AERIAL AND TERRESTRIAL VIEW

# ROAD SAFETY/SUPPORT COMMUTER ENABLERS

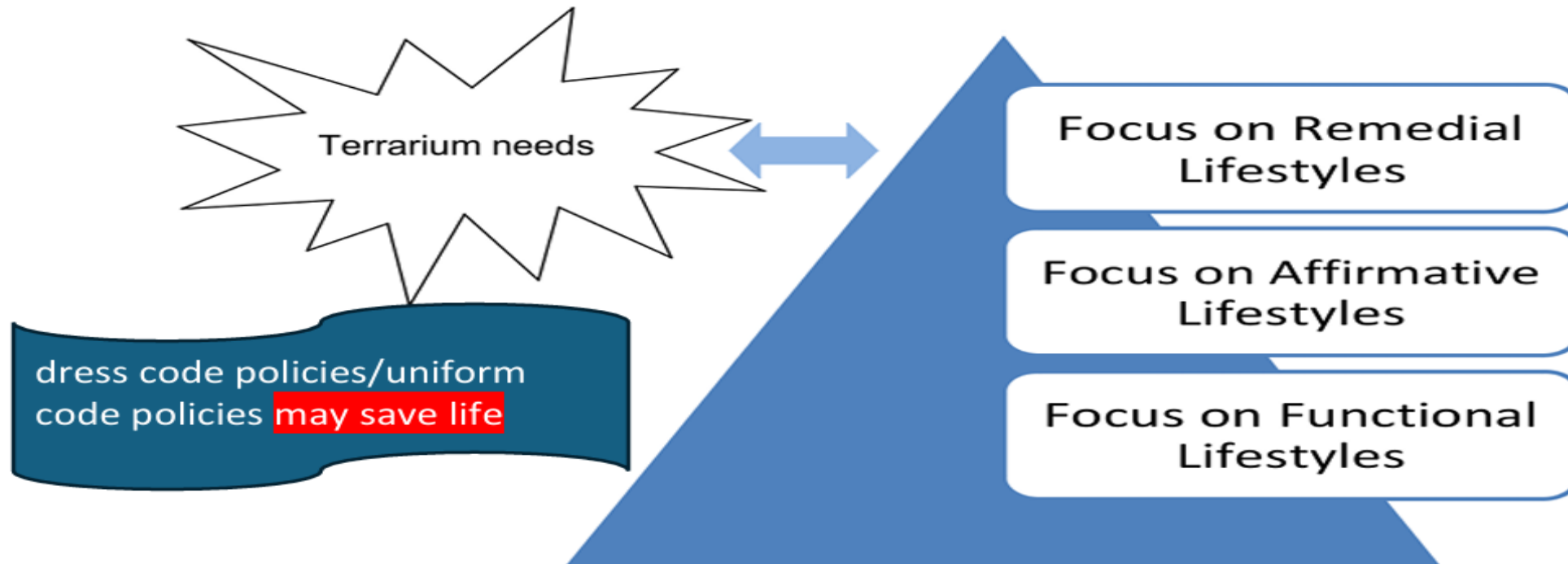
Climate Change influences on Personal and Professional Clothing in-turn leading to new demands for field level clothing

## Essential 6: Field Level Clothing that ensures more visibility

Simple or standard protection field level clothing

Mission critical field level clothing

Relief work field level clothing



# ROAD SAFETY/SUPPORT COMMUTER ENABLERS

Climate Change influences on Personal and Professional Clothing in-turn leading to new demands for field level clothing where dress code policies/uniform code policies **may save life**

Simple or standard protection field level clothing

- Protective glasses
- Visible clothing
- Helmets / Hard hats
- Clothing / Wear to commute in climate impacted days
- Driving or wear to commute gloves
- Firm sole shoes/ boots
- specific color coding for health and wellness indications
- specific color coding for school/college/work/religious work supporting clothing/uniforms
- specific color coding for Raincoats/vests/pants

Mission critical field level clothing like the ones needed by

- BESCO
- BWSSB
- BBMP ROAD REPAIR
- BBMP TREE CONSERVATION
- BBMP ROAD ARBORICULTURE
- BBMP TRAFFIC ENGG
- TRAFFIC DEPARTMENT PERSONNEL
- HEALTH/ACCIDENT/EMERGENCY RESPONSE TEAMS
- ANIMAL / LIVESTOCK HEALTH/ ACCIDENT/EMERGENCY RESPONSE TEAMS
- FIRE AND EMERGENCY RESPONSE TEAMS
- ACTION FORCES AT THE CIVILIAN LEVEL
- LOGISTICS/COURIER SERVICES
- CYBER SECURITY SERVICES
- Navigation and field mapping services
- PAYLOAD/DMS KIT DELIVERY SERVICES
- AUTOMOBILE AND EV SERVICES/REPAIRS
- PUBLIC TRANSPORT SERVICES//REPAIRS
- Warranty / Insurance Claim Services

Relief work field level clothing like the ones reflective of

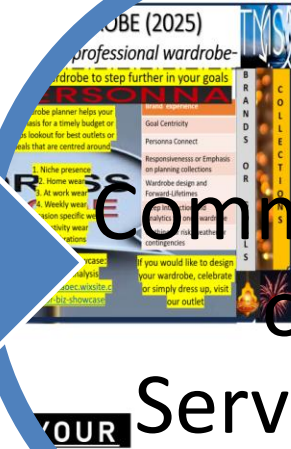
- Social responsibility duty
- Civil assistance/defence duty
- Aged/Disabled/Afflicted duty
- Certified responder duty
- Mission critical
- Segmentation/Target Group duty
- Celebration/Festivity/Tourism duty
- State level duty
- National level duty
- Global level duty
- anti-aircraft defense duty
- Ground station system duty

# IMPACT RESOLUTION? OR VISIBILITY ENABLING?

Risks of

Visibility In

Commuting  
or  
Services?



- Deep Interaction, trending collection, innovative designs/co
- This inferencing involves subscription order evaluat
- Customer Costs Management
- Customer Behaviour Model
- Customer Dimensions Model
- Business Subscription Analytic
- Future Sales Analytics
- Future Product Analytics
- Key Opinion Leadership and mapping studies
- Opportunity-Window-for product effectiveness
- We are work in pro

**Why  
Safety  
Signage?**

Why Control and  
Impact  
Coverage?

# ***Essential 7: Logistics and Analysis***

**Road systems and Analysis to reduce power outage or traffic signal or road lighting failures**

- ❖ Control and Impact Coverage via SMART Contracts
- ❖ Vehicle Learning
- ❖ Road system - Demand forecasting
- ❖ Road system - Route optimization
- ❖ Road system/route - Developing metrics
- ❖ Road system/route - Logistics and Transportation KPIs Performance management
- ❖ Control and Impact Coverage based SMART Warehousing of improved/remedial/repair related Road network / infrastructure related systems/electronics/sensors/devices

# Essential 8: SMART Warehouse metrics

TE: Traffic Engineering / Road system or infrastructure departments

## 13 Viewpoint mapping and Warehouse metrics

- Capacity
- Utilization
- Downtime or idle time
- Systems/Electronics/Sensors/Devices/emerging TE Product Variety
- Average TE product size
- Warehouse service level
- SMART contribution for 20% of problems
- Quality losses to TE Product variety
- Cycle specific Setup time or processing time for Warehouse service levels
- Warehouse service cost per TE product/unit
- Theoretical flow or cycle time
- Actual average flow or cycle time



# ***Essential 9: Warehousing and Crisis Resolution Service Network/Team KPI(s)***

## **Control & Impact Matrix based Crisis Resolution Service Network/Team KPIs**

- SMART Resolution of control & impact issues
- Commuter and Service context satisfaction
- Timing and frequency of need
- Complaints and redressal
- Needs-understanding trends
- Demand-fulfilment trends
- Remnant issues for next events
- Responsiveness for crisis dynamics

TE: Traffic Engineering / Road system or infrastructure departments



WHEN TRAFFIC SIGNALS AND ROAD LIGHTING ARE NOT FUNCTIONAL

## Why Safety Signage?



TE: Traffic Engineering / Road system or infrastructure departments

Essential 10: Control and Impact Coverage?





Ward(s)

- \_\_\_\_\_ Ward No
- \_\_\_\_\_ Ward No
- \_\_\_\_\_ Ward No
- \_\_\_\_\_ Ward No
- \_\_\_\_\_ Ward No

**SOCIAL  
ACCOUNTABILITY**

**Help Accountability/AI/BI/CQI for**

**National Safety Social Responsibility Top  
10 insights for (Road) Safety  
Programmes**

**National Safety Social Responsibility Top  
10 insights for Co-achieving Support  
Programmes**

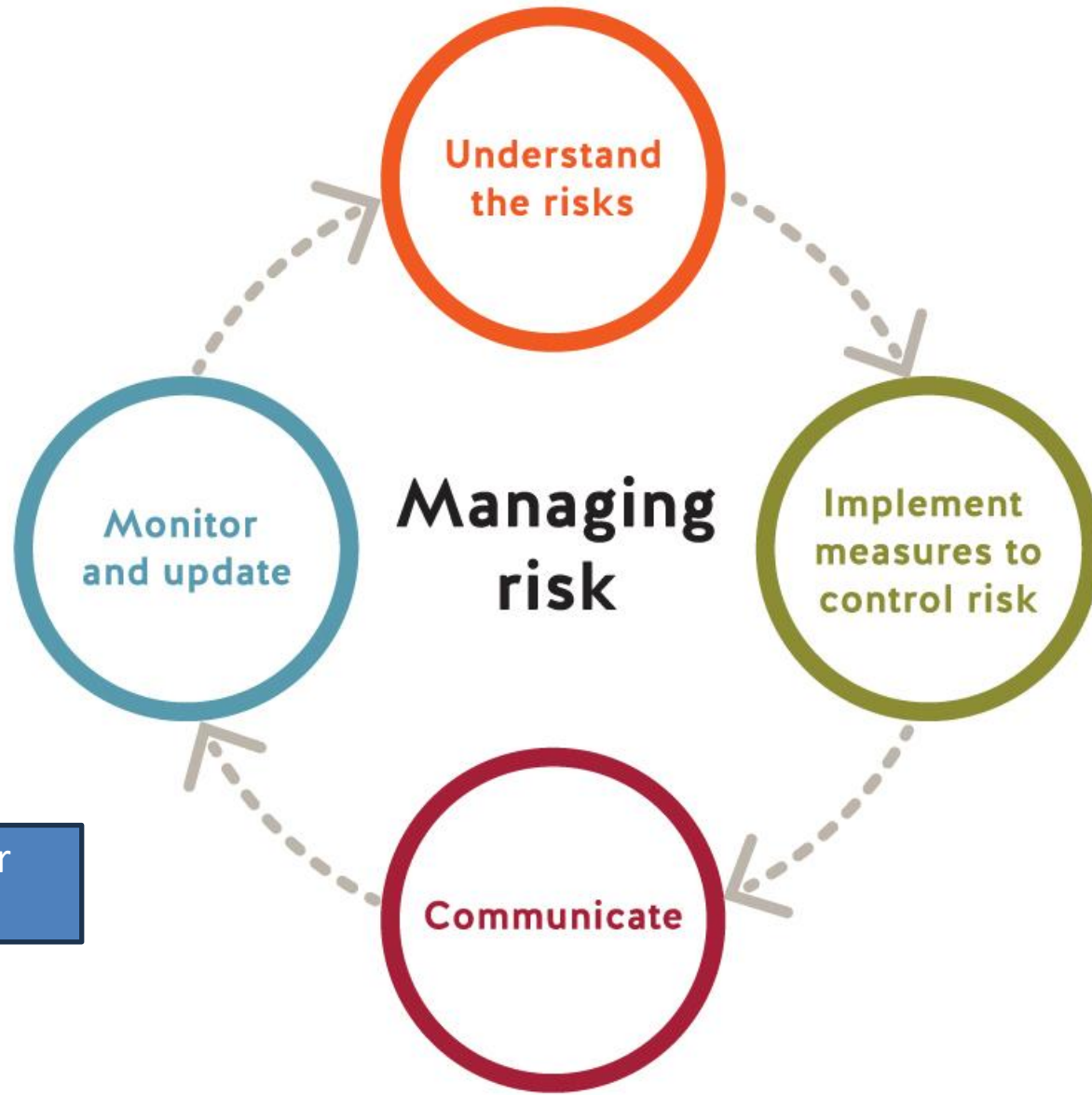


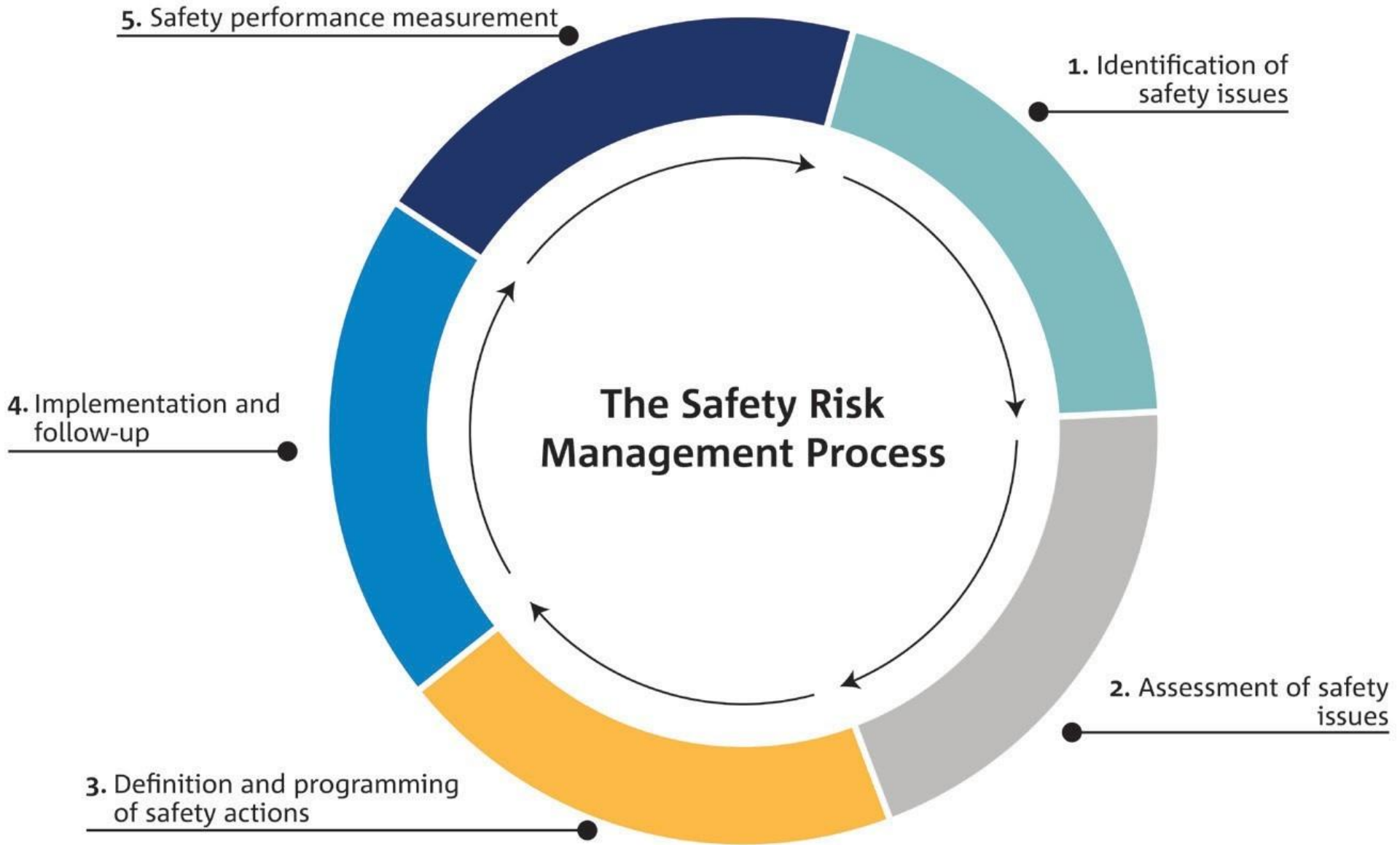
TE: Traffic Engineering / Road system or infrastructure departments





TE: Traffic Engineering / Road system or infrastructure departments





# Why Safety Signage?



Taxis and Safety

Why Control and Impact Coverage?



PASSENGER AND COMMERCIAL 4W(S)

WHEN TRAFFIC SIGNALS AND ROAD LIGHTING ARE NOT FUNCTIONAL



Autos and Safety

UNDONE WORK?  
BAD WEATHER ISSUES?

# Why Safety Signage?



Why Control and Impact Coverage?

Buses, Vans and Safety

UNDONE WORK?  
BAD WEATHER ISSUES?

WHEN TRAFFIC SIGNALS AND ROAD LIGHTING ARE NOT FUNCTIONAL



Two-wheelers and Safety

## Why Safety Signage?



Why Control and Impact Coverage?

Veritable Metro and On Road Services

UNDONE WORK?  
BAD WEATHER ISSUES?

WHEN TRAFFIC SIGNALS AND ROAD LIGHTING ARE NOT FUNCTIONAL

Fire Emergency and Safety Services



# Why Safety Signage?

Why Control and Impact Coverage?

## Emergency Response Services Network



WHEN TRAFFIC SIGNALS AND ROAD LIGHTING ARE NOT FUNCTIONAL



UNDONE WORK?  
BAD WEATHER ISSUES?

An aerial or terrestrial viewpoint mapping for Fire and Emergency Services Actuation, Emergency Response Services, problem solving for dysfunctional traffic systems/ poor or bad road infrastructure/ dynamic Natural Systems interface environments

# ***Logistics and Transportation KPI(s)***

## **Transportation KPIs for Supply Chain/Commuter Network**

- Road System Analysis for Commuter, or B2C or B2B cycle time
- On-time commuting and/or deliveries
- Cost per commuter and/or transport
- Average outbound and inbound transportation cost
- Average outbound and inbound shipment size
- Passengers or Shipment Fraction transported by a mode
- Average outbound and inbound transportation cost per shipment

WHEN TRAFFIC SIGNALS AND ROAD LIGHTING ARE NOT FUNCTIONAL



Why Control and Impact Coverage?

# “CONTROL & IMPACT MATRIX COVERAGE FOR ROAD SAFETY/SUPPORT IN POWER OUTAGE / DEGRADED CONDITIONS”

WHEN TRAFFIC SIGNALS AND ROAD LIGHTING ARE NOT FUNCTIONAL

Step 4: Automobile Dealer Control & Impact coverage contract development and finalization

The Automobile Dealer will need to subjectively agree to a Control and Impact coverage contract that covers multiple or singular scenarios depending on the priority and needs understanding of the dealer

The scenarios could include coverage to manage issues of the brand or brands that are part of its business interests for the work in progress logo called “Enabled for I3 regulations”, where the scenarios could cover options like

- Vehicles in Key affliction and visible degradation scenarios
- Vehicles with Key affliction without visible degradation scenarios
- Vehicles with Visible degradation without key affliction scenarios
- Vehicles under deserving I3 regulation scenarios



Why Control and Impact Coverage?

# “CONTROL & IMPACT MATRIX COVERAGE FOR ROAD SAFETY/SUPPORT IN POWER OUTAGE / DEGRADED CONDITIONS”

WHEN TRAFFIC SIGNALS AND ROAD LIGHTING ARE NOT FUNCTIONAL

Key afflictions could include

- Affected by dirt/fallen debris/contaminants
- Affected by storm water flooding/rain/seepage
- Affected by external conditions like damage caused to body/engine/accessories/vehicle sheet Q1/Q2/Q3/Q4 indications
- Affected by lack of Service Anywhere Anytime scales

Visible degradation could include

- Conspicuity degradation that could lead to vehicle or usage degeneration
- Conspicuity degradation that could lead to high maintenance
- Conspicuity degradation that could lead to limitation of liability for standard or extended warranty or interlinked Quality of performance / discerners like health and safety expectations or product/part/sub-system/system codification for transportation safety

Deserving I3 regulations for older or not too techno savvy brands could include

- Degradation or loss of quality functions for nutshell inventory
- Limited Health maintenance or low useful lifetime for nutshell inventory
- Degradation or loss of quality functions for Service Quality Model



Why Control and Impact Coverage?

# “CONTROL & IMPACT MATRIX COVERAGE FOR ROAD SAFETY/SUPPORT IN POWER OUTAGE / DEGRADED CONDITIONS”

WHEN TRAFFIC SIGNALS AND ROAD LIGHTING ARE NOT FUNCTIONAL

## The PRM SCALE & VISION FOR GRADED TRANSPORTATION

The Automobile Dealer/network/business will need to incorporate ~~Graded Transportation Warehousing for COPMA Transformation and~~ Degradation & Graded Transportation Conspicuity and Safety Markings for the newer COPQ enabled I3 regulation for its vehicles on road on the basis of the

- Vehicle brand
- Vehicle model
- Vehicle type
- Configuration
- Size
- Warranty scale
- With or Without Dashcam vision
- Heuristic system enablers or discerners
- Conspicuity scale
- With or Without a need to transport alpha-profile passengers



Why Control and Impact Coverage?

# “CONTROL & IMPACT MATRIX COVERAGE FOR ROAD SAFETY/SUPPORT IN POWER OUTAGE / DEGRADED CONDITIONS”

## COPQ-SMART CITY MODEL CONTRACT SERVICES

- Automobile Dealer feedback management

All NSSR RS Programme feedback/issue elevation/complaints & redressal for the Automobile Dealer/network/business will be as per the COPQ-SMART-CITY contract programmes



SOLUTION FOR  
TRAFFIC SIGNALS  
AND ROAD  
LIGHTING ARE NOT  
FUNCTIONAL



With Control and  
Impact  
Coverage?