SCOPE OF JOB

2.1. Scope of Work for Tender: Journey Management Plan and Route Selection

2.1.1. Introduction:

This scope of work covers to conduct a comprehensive Journey Management Plan (JMP) assessment and Route Selection for transportation from client supply locations to retail outlets or customer destinations. The aim is to enhance route safety and ensure regulatory compliance through detailed study, identification, and reporting, utilizing insights of JMP & Route Selection study.

2.2. Part 1: Journey Management Plan (JMP) Assessment

a. Regulatory Compliance Assessment:

Examine all transportation routes to ensure adherence to the Central Motor Vehicles (Eleventh Amendment) Rules, 2022. This includes evaluating road conditions, speed limits, and risk zones, critical for the safe transport of hazardous materials. Assessment needs to address compliance with standards such as AIS 140 and RTSP, ensuring all operational activities reflect these legal frameworks.

b. Risk Zone Identification and Categorization:

Analyze transportation routes to identify and classify them into high-risk and medium-risk zones, focusing on sharp turns, accident-prone areas, and elevation changes. Generate actionable recommendations for each identified risk zone, including proposed speed regulations and driver alerts for dangerous zones.

c. Road Transportation Safety Policy Compliance RTPS:

Assess & provide provisions of the RTSP, outlining mandatory driving hours, rest periods, and restrictions on night driving to ensure that drivers comply with government guidelines, such as taking scheduled rest breaks and avoiding hazardous road conditions like poor visibility, high congestion, accident spots or dangerous intersections during peak hours.

d. Emergency Preparedness Evaluation:

Identify and report on predetermined emergency stop locations for fuel, rest, and overnight stays, outlining strategic plans for safe responses to road hazards. Include protocols for rerouting during emergencies, road closures, and severe weather conditions. Providing nearest Emergency Response contact details & that of Supply location.

e. Environmental Risk Assessment:

Study environmental risks along each route, ensuring compliance with laws in ecologically sensitive areas. Identify zones near water bodies and forests and report cautionary measures. Identify in JMP the approach required to environmental considerations as a guide for implementing risk mitigation strategies.

f. Route-Specific Risk Mitigation Analysis:

Conduct detailed route-specific risk assessments and prepare comprehensive trip sheets and guidelines for defensive driving, tailored to each transportation route. The integration of Journey Management Plan with vehicle tracking systems ensures real-time

alerts for hazardous zones, speed limits, and mandated stops, in line with RTSP and CMVR safety regulation.

2.3. Part 2: JMP & Route Selection Optimization

Conduct detailed route-specific risk assessments and prepare comprehensive trip sheets and guidelines for defensive driving, tailored to each transportation route. The integration of Journey Management Plan with vehicle tracking systems ensures real-time alerts for hazardous zones, speed limits, and mandated stops, in line with RTSP and CMVR safety regulation.

a. Alternative Route Evaluation and Risk Ranking:

Evaluate three alternative routes for each Supply to Destination location pair, analyzing feasibility based on distance, road conditions, and associated risk conditions. Rank these alternatives using a comprehensive risk ranking system to quantify the risk associated with each route.

b. Route Recommendation:

Suggest the best possible route for each customer, focusing on the route with the lowest risk ranking as determined by the evaluation process. Provide a detailed report recommending the optimal route, highlighting factors contributing to its ranking as the safest and most efficient option. While suggesting the Recommended route the due consideration shall also be given to efficient route in terms of less travel time, less distance & lesser toll rates. However, same shall not be given more weightage when compared to risk factor.

c. Identification of Critical Road Features:

Identify critical road features such as sharp turns and elevation changes, categorizing them into risk levels based on the methodology from the sample JMP. Analyze turns and blind spots marked as high-risk and provide detailed reports on strategic advisories for safe navigation.

d. Alternative Route Analysis:

Examine and report potential alternative routes and bypasses for emergency use to avoid congestion and improve efficiency, reflecting the strategies in the JMP.
Identify strategic locations to ensure emergency readiness.

e. Speed and Driving Regulation Assessment:

Determine and report on appropriate speed limits and driving time regulations relevant to each road type assessed, ensuring all parameters meet safety standards.

f. Rest Stop Identification:

Identify and recommend suitable rest stops along each route, classifying them based on accessibility and alignment with operational needs.

g. Covering all the Complete Job scope of JMP as defined in Section -2.2.

2.4. Deliverables –

Based on the detailed scopes of work for Journey Management Plan (JMP) and Route Selection & JMP, the following deliverables are required as part of the project:

2.4.1. Journey Management Plan (JMP) Deliverables:

a. JMP Study Report:

Conduct and deliver a comprehensive JMP study of approved routes between designated starting and ending points authorized by THE CLIENT. Provide general guidelines and detailed information about each route to offer a holistic understanding of the terrain and conditions.

b. Route Overview Report:

Detailed description of the journey, including total distance, estimated travel duration, main highways, and terrain type.

c. Hazard Identification and Risk Categorization:

Identify and document major hazards, including latitude and longitude coordinates for geotagging in the Vehicle Tracking System (VTS). Categorize identified risks into High or Medium categories; recommend specific speed limits and appropriate precautions to mitigate these risks effectively.

d. Climate and Seasonal Reporting:

Analyze typical weather patterns and climate conditions that may affect the route:

i. Summer hazards (heat-related vehicle issues), monsoon challenges (flooding, reduced visibility), and winter conditions (fog).

ii. Recommendations for driver awareness and vehicle maintenance based on seasonal impacts.

e. Traffic and Road Conditions Assessment:

Overview of expected traffic patterns and road infrastructure quality, identifying congestion areas and construction zones.

f. Regulatory Compliance Overview:

Documentation of necessary permits, vehicle compliance, and local transport regulations for hazardous materials.

g. Key Locations and Emergency Services Identification:

Deliver a comprehensive list of key locations along each route, including hospitals, police stations, fuel stations, and other relevant emergency services. Identify safe and convenient rest stops for drivers to take breaks after every three hours of continuous driving.

h. Safety Recommendations:

Guidelines for overall safety, including speed limits, risk mitigation strategies, and vehicle maintenance protocols for drivers.

i. Journey Duration and Break Scheduling:

Estimated driving and rest periods, recommending breaks every three hours of continuous driving.

j. Emergency Preparedness Guidance:

Recommendations for vehicle safety equipment and emergency procedures.

k. Visual Documentation:

Visual Documentation

Interactive HTML maps

AI-filtered street view images
Risk zone visualization
Route elevation profiles
Emergency response maps

i. Bidder has to extend full support for integration of the Geo – coordinates, along with the findings of the JMP with existing VTS (vehicle Tracking System) & mobile application of THE CLIENT.

2.4.2. JMP & Route Selection Deliverables:

a. Route Identification and Analysis Report:

• Identify all possible routes between the designated starting point and endpoint for each truck route.

• Conduct a detailed analysis of each route to capture varying risks, distance, estimated travel duration, road types, urban areas, potential hazards, etc.

b. Comparative Route Analysis and Risk Scoring:

• Perform a comparative analysis of all routes, providing a comprehensive risk score out of 10 for each. This score should reflect the combined assessments of risks and operational efficiency for each route.

c. Route Recommendation:

• Provide a final recommendation for route selection based on the detailed analysis and risk scoring. Emphasize the balance between safety, efficiency, and compliance in choosing the optimal path.

d. Comprehensive Presentation and Review:

Conduct presentations to THE CLIENT stakeholders summarizing the JMP study results, route analyses, and recommendations. Engage stakeholders in a review session to address queries and discuss the potential implications of the findings.

e. Visual Documentation:

• Visual Documentation
• Interactive HTML maps
• AI-filtered street view images
• Risk zone visualization
• Route elevation profiles
• Emergency response maps

f. All the deliverables of JMP as defined in 2.4.1.

g. Bidder has to extend full support for integration of the Geo – coordinates, along with the findings of the JMP with existing VTS (vehicle Tracking System) & mobile application of THE CLIENT.