



AGIL 

URBAN TRAFFIC MANAGEMENT SYSTEM

 ST Engineering





Urban Traffic Management System

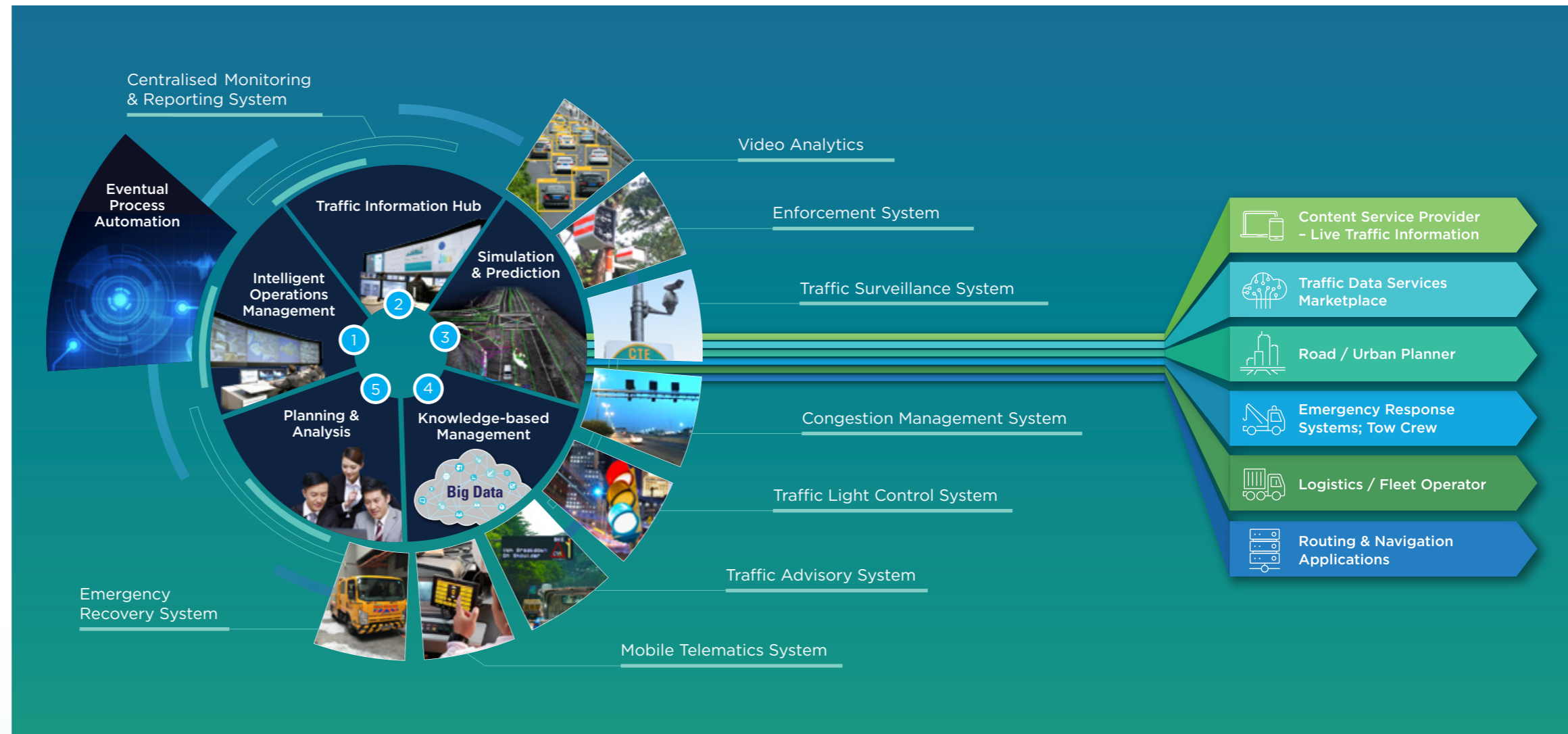
Seamless, Safe and Reliable

Cities are facing increasing congestion due to urbanisation. Leveraging artificial intelligence (AI) and data analytics, the Urban Traffic Management System provides a single platform that unifies transport sub-systems, applications and data sources to enable authorities to better manage traffic congestions and shorten incident response time.




Commuters will benefit from receiving real-time information on-the-move to enhance their travel experiences.

Key Capabilities

-  Overview of city-wide road networks and resources
-  Centralised management of various transport sub-systems
-  Automated knowledge-based traffic management
-  Data-driven transport management using artificial intelligence, big data and video analytics



Artificial Intelligence-Enabled

-  **Video Analytics**
Provide traffic information and identify traffic incidents accurately
-  **Automatic Incident Detection**
Automate detection of incidents and anomalies to improve responsiveness
-  **Expert System**
Capture the experience and skill sets of traffic experts to generate response plan quickly for traffic incidents
-  **Traffic Prediction**
Forecast traffic flow with advanced simulation for pro-active traffic management and planning

Key Benefits

- Enhance situational awareness and operational efficiency
- Reduce man-in-loop with AI to automate incident response
- Pro-active traffic management to mitigate congestions
- Enhance transport planning and policy setting
- Reduce congestions and carbon footprint

Data-driven Centralised Management of Multiple Sub-systems

Key Systems

- 1 Intelligent Operations Management**
 - Integrated control and management of various sub-systems
- 2 Traffic Information Hub**
 - Aggregate, integrate and disseminate information from various sources
 - Vehicle detection systems (e.g. loop sensors, radar / vision based vehicle detectors, bluetooth travel time sensors)
 - External data sources (e.g. commercial traffic services, taxis, buses and police cars)
 - Smart cameras (e.g. corners, vehicle counters)
 - Roadway weather information systems (e.g. ground sensors)
- 3 Simulation and Prediction**
 - Leverage dynamic simulation and traffic forecast to evaluate and recommend response plan for congestions
- 4 Knowledge-based Management**
 - Expert system with automated generation of incident action plan for faster response with minimal human intervention
- 5 Planning and Analysis**
 - Provide operations report, Key Performance Indicator (KPI) review, congestion hotspot analysis, and road network improvement

Proven Results

Our Urban Traffic Management System has helped our customers to achieve the following improvement:

- Reduces incident handling time by up to 53%
- Reduces accident duration by up to 56%
- Reduces traffic jam duration by up to 23%
- Reduces operation training time by up to half a day

Our solutions have managed more than 5000km of roads for cities worldwide.

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