

## INTELLIGENT TRAFFIC MANAGEMENT SYSTEM (ITMS) CITY AUTOMATION (E-GOVERNMENT)

Consulting | Advisory | Contracting | Managed Services - a multi-competency smart automation, IT & power engineering enterprise



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### **XGT** in Brief



**Xceptional Global Technologies Ltd.,** (aka XGT) is a member of XGT International, a multi-competency engineering enterprises with office in Lagos Nigeria and affiliate offices in Singapore, South Korea, India, and a cream of other global technology partners.





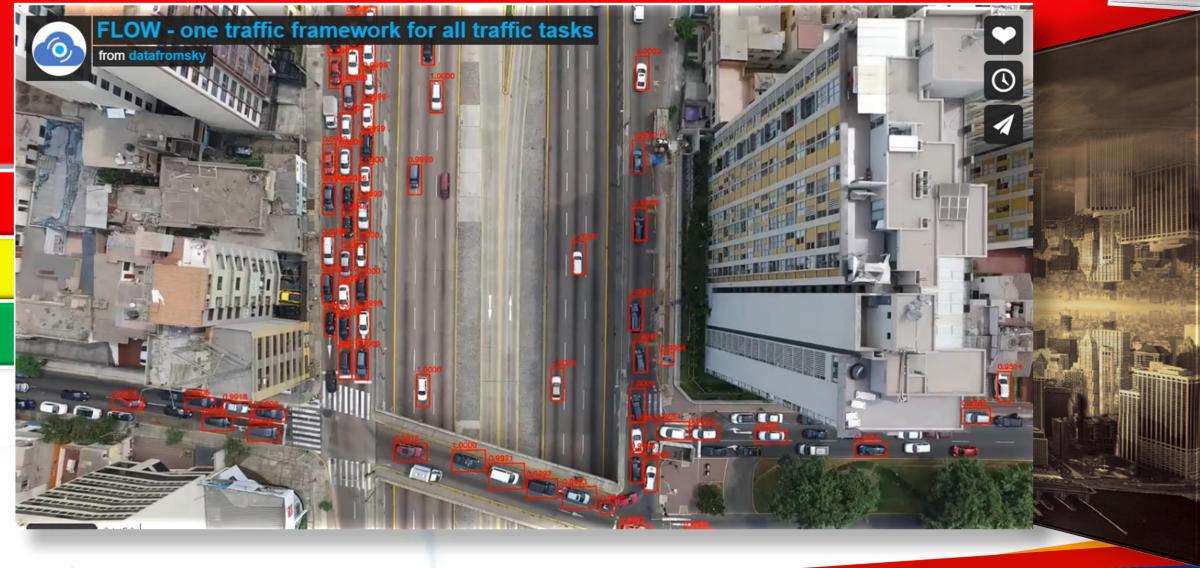




XGT in collaboration with Trafksol (ITS Technologies PVt Ltd, India ) and Data From Sky (RCE systems s.r.o. Svatopluka, Czech Republic) is positioned to becoming a market leader in Intelligent Traffic Management Solution (ITMS) provider among others premium products and services. XGT is out to unleash organization's true potentials by maximizing performance and efficiency .

## XGT-Intelligent Traffic Management Solution (ITMS) In Picture





## ITMS in Brief & Economic Stimulus Package Advantages



#### **ITMS IN BRIEF**

The Intelligent Traffic Management System (ITMS) is an integrated solution of multiple technologies merged to improve the flow of vehicle traffic, improve safety, increase IGR and minimize the road accident on highways using some highly Intelligent equipment like ECB, VMS, ATCC, MDS, VIDS and MRCS etc.

Real-time acquired/captured traffic data from traffic detection system flow into a Traffic Control Center (TCC) where it is integrated and process and may result in actions (e.g. traffic routing, VMS messages) with the goal of improving flow of traffic and minimizing losses.

## Economic Stimulus Package Advantages

- Generate revenue and Increases IGR from:
  - eVehicle registrations
  - Annual vehicle particulars renewals
  - Automatic Traffic offenders capture,
     booking and penalties redemption

### ITMS – Features & Equipment



#### **FEATURE OF ATMS**

- Smooth and Uninterrupted Traffic flow
- Increase in transportation system efficiency
- Smart Mobility
- Reduce Journey time and inconvenience
- Enhance Road Safety
- Alerts for abnormal road and weather conditions

#### **EQUIPMENT OF ATMS**

- ECB (Emergency Calling Box)
- VMS (Variable Message Sign)
- ATCC (Automatic Traffic Counter Cum Classifier)
- MDS (Meteorological Data Station)
- VIDS (Video Incident Detection System)
- MRCS (Mobile Radio Communication System)
- ATMS Control Room.

## **Speed Enforcement & E-Challan System -SEES**





#### SPEED ENFORCEMENT & E-CHALLAN SYSTEM

SEES was introduced to ITS by considering the number of accidental deaths on highways causing by over speeding of vehicles. Speed Enforcement & E-Challan System will be working as a violation warning for those vehicles which crosses the maximum allowed speed on that route. This system will be capturing the Speed of each vehicle and also will capture the Image for those vehicles which crosses the speed limit on that route and find the details from vahan.nic.in and penalize the person to restrict them from repeating the same.

### **FEATURES**

- Awareness for the road user about their speed.
- Displaying the vehicle speed on bigger display. Online Penalty impose on speed violation.

  - Reducing the number of over speeding vehicle
  - Increasing Road-Safety.

## **EQUIPMENT OF SEES**

- Ladder based speed camera with
- ANPR.
- PTZ camera.
- Wireless modules (3G/4G). Local Controller. SEES Control

# Red Light Violation Detection System – RLVD & Expired Vehicle Particulars Violation Detection System- EVPVD



# RED LIGHT & EXPIRED VEHICLE PARTICULARS VIOLATION DETECTION SYSTEM

Red Light Violation Detection (RLVD) and Expired Vehicle Particulars Violation Detection (EVPVD) systems were introduced to ITS by considering the number of accidental deaths on traffic congestions causing by over speeding of vehicles and expired vehicle particulars defaulters. Red Light & Expired Vehicle Particulars Violation detection system will be working as a violation warning for those vehicles which will try to violate the traffic signals at traffic junctions. This system will be capturing the image for those vehicles which violates the traffic signal or renewal responsibility and find the details from the <a href="https://nvis.frsc.gov.ng/VehicleManagement/VerifyPlateNo">https://nvis.frsc.gov.ng/VehicleManagement/VerifyPlateNo</a> and penalize the person to restrict them from repeating the same in future.



#### **EQUIPMENT OF RLVD**

- ANPR Camera.
- PTZ camera.
- Wireless modules (3G/4G).
- Local Controller.
- RLVD Control Room

#### **FEATURES**

- Awareness for the road user about traffic safety.
- Generating Alarm on Red-light Violation.
- Online Penalty impose on Traffic Signal violation.
- Reducing the number of accident on Traffic Congestion.
- Resulting Better and Smoother Traffic flow.
- Increasing Road-Safety.

# Red Light Violation Detection System – RLVD & Expired Vehicle Particulars Violation Detection System- EVPVD



#### URBAN TRAFFIC MANAGEMENT SYSTEM

Traffic jams at congestion is the major problem in urban area, which causes increase in travel time and sometime accidents and rages. The key problem which causes this situation is the manual interference in the traffic signal and sometimes users purposefully does this. UTMS was introduced to ITS to manage the traffic flow and traffic signaling in the urban area to manage the traffic flow and penalize the persons who tries to break the signals. This system will also indicates the road users about the traffic status through the variable message sign placed through the urban area. It will also have the incident detection system which will identify any kind of accident, unwanted objects and rages and notify to the control room which can be communicated to the users through radio and VMS. All the major areas will be covered by the CCTV surveillance system to provide live status view at UTMS control rom. UTMS will also have RLVD included within it.

#### **FEATURES OF UTMS**

- Radio and Visual messages to the road users about traffic status.
- Managing traffic signals in synchronization.
- Video Monitoring of Urban traffic network.
- Urban Traffic Radio System.
- Generating Alarm on Red-light Violation.
- Online Penalty impose on Traffic Signal violation.
- Reducing the number of accident on Traffic Conges tion.
- Resulting Better and Smoother Traffic flow.
- Increasing Road-Safety.

#### **EQUIPMENT OF UTMS**

- ANPR camera
- PTZ Camera
- Wireless Modules (3G/4G)
- **■** VMS
- ☐ LED Signal System
- Local Controller
- UMS Control Room

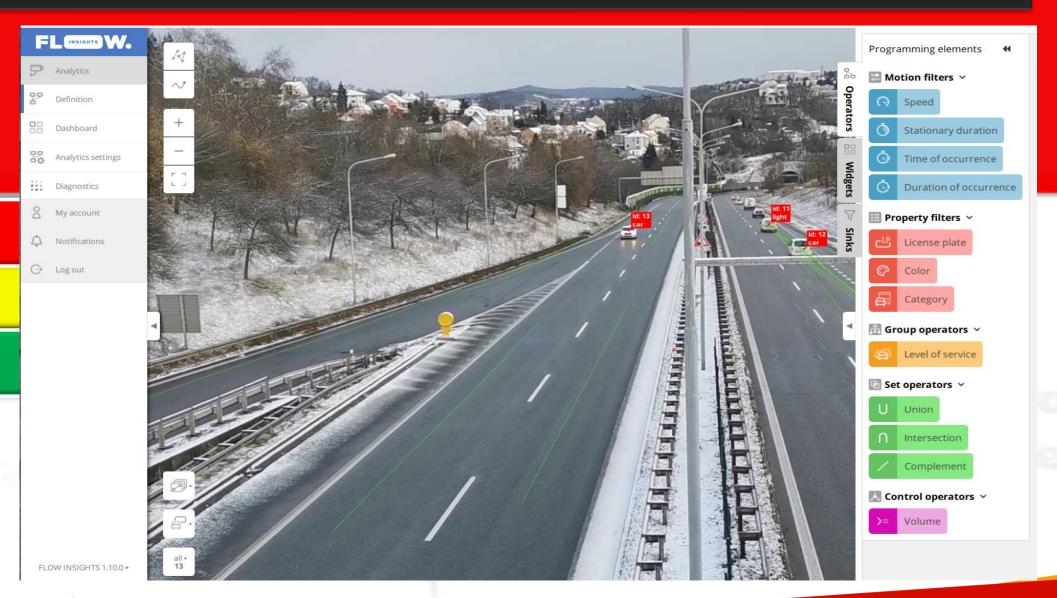


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### **ITMS Insights & Analytics**





## **Deployment Methodology**



# Project Initiation

- 1. Proposal Presentation.
- 2. Proposal Acceptance
- 3. Business Model formulation
- 4. Contract documents execution

## **Equipment Delivery**

- 1. Site Preparation.
- 2. Server/Hardware deployment
- 3. Hardware Deployment
- 4. Software Deployment
- 5. Information flow policy formulation

### Integration & UAT

- 1. Configurations & integrations
- 2. UAT
- 3. Training
- 4. Commission
- 5. Solution operation and management

## What's the bottom line?



- □ Reduce accidents
  - Reduce time lost in traffic.
- Increase IGR.
- Increase productivity

- Increases security of lives and properties.
  - Acquired/Captured data enables accurate and efficient decisions
- Reducing dependency on crude information gatherings
- Allows better responses and events management

Is it about?

## Is it City Automation- E-Government Solutions?

- ☐ An assessment
- ☐ A survey
- ☐ Chat
- ☐ A quote









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