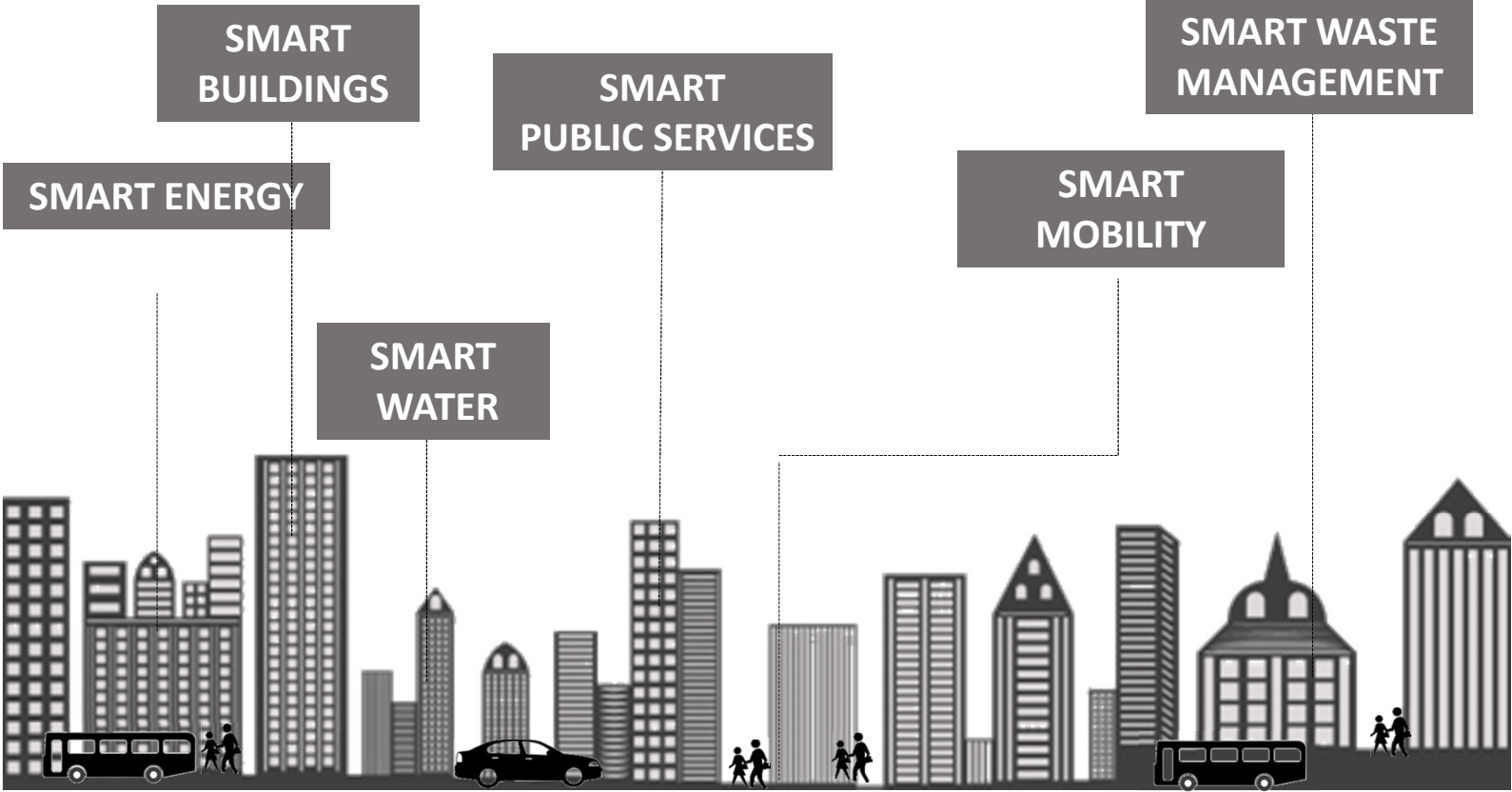




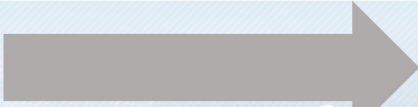
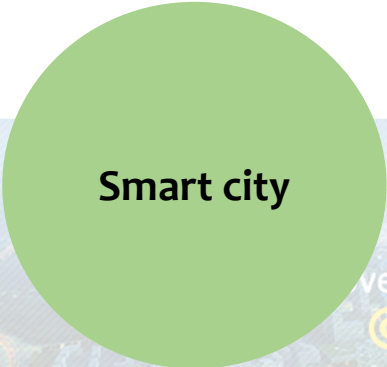
Smart Infrastructure



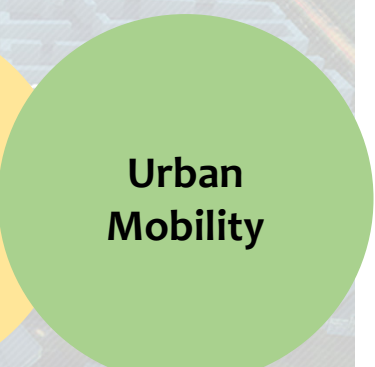
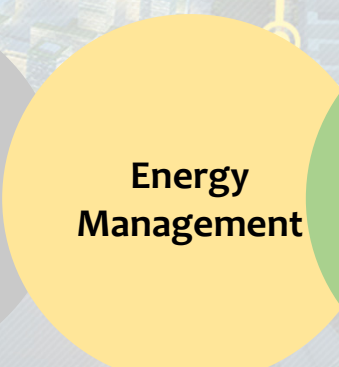
Smart City



Focus Areas



Gives **core infrastructure** and a decent quality of life to its residents, a **clean, Safe** and **sustainable environment** by the application of **smart solutions**.



Smart Cities Initiatives by Govt. of India



The Smart City Mission will cover 100 cities in India in a time span of 5 years

5 most common themes emerging for pan-city solutions across cities

Transportation



Security



Solid waste management



Water



Energy



Selection Process

Stage 1 - Competition (within State)

Number of potential Smart Cities have been intimated to each State, based on an *equitable & objective based formula*



An intra-state competition to select proposed Smart Cities, based on the Stage – I criteria



The state to select the cities and intimate the list of cities for smart city challenge to MoUD - **Short listed Smart Cities**

Selection Process

Stage 2 – City Selection (All India Competition)

On the basis of response from the states/UTs, the **list of potential 100 Smart Cities will be announced**. The second stage will begin. **(All India Competition)**



Each **potential Smart city will prepare its proposal** with the help of a consultants



Stage-2: Proposals will be submitted by the stipulated date for the evaluation process



Selected cities will be declared- **Round 1 Smart Cities**

Selected cities setup SPV and start implementation



Other cities prepare to improve their proposal for next round of challenge

Funding



- As a **Centrally Sponsored Scheme** - Each Smart city will get Rs. 500 Cr.- First year Rs. 200 Cr. thereafter Rs. 100 Cr. every year
- State / ULBs will mobilize matching resources based on **50:50** **funding pattern**

Planning

Advance of **Rs. 2 Cr.** to shortlisted cities to prepare Smart City Proposal

Implementation

Project Management Consultants (PMC) for designing, developing, managing and implementing area-based projects

Implementation and Financing

- Each city will have a **Special Purpose Vehicle (SPV)**. The SPV will have complete flexibility to plan, implement, manage & operate and will be headed by a full time CEO
- At city level **Smart City Advisory Forum** will be established.
- The Smart City Advisory Forum will include the **District Collector, MP, MLA, Mayor, CEO of SPV**, local youths, technical experts, and representative of Associations
- The **CEO** of the SPV will be the **convener** of the Smart City Forum

Mission Monitoring

National level – Apex Committee (AC) headed by Secretary, MoUD



State level -State level High Powered Steering Committee (HPSC) -
chaired by the Chief Secretary



City Level - CEO of the SPV is convener of the Smart City Forum

The 'Smart Cities' mission has two key elements for each city :

1

	Local Area Development	Minimum Area Requirement	Example
Development model	▪ Greenfield	250+ acres	A GIFT City
	▪ Retrofitting	500+ acres	B Bandra Kurla Complex
	▪ Redevelopment	50+ acres	C Bhendi Bazaar, Mumbai

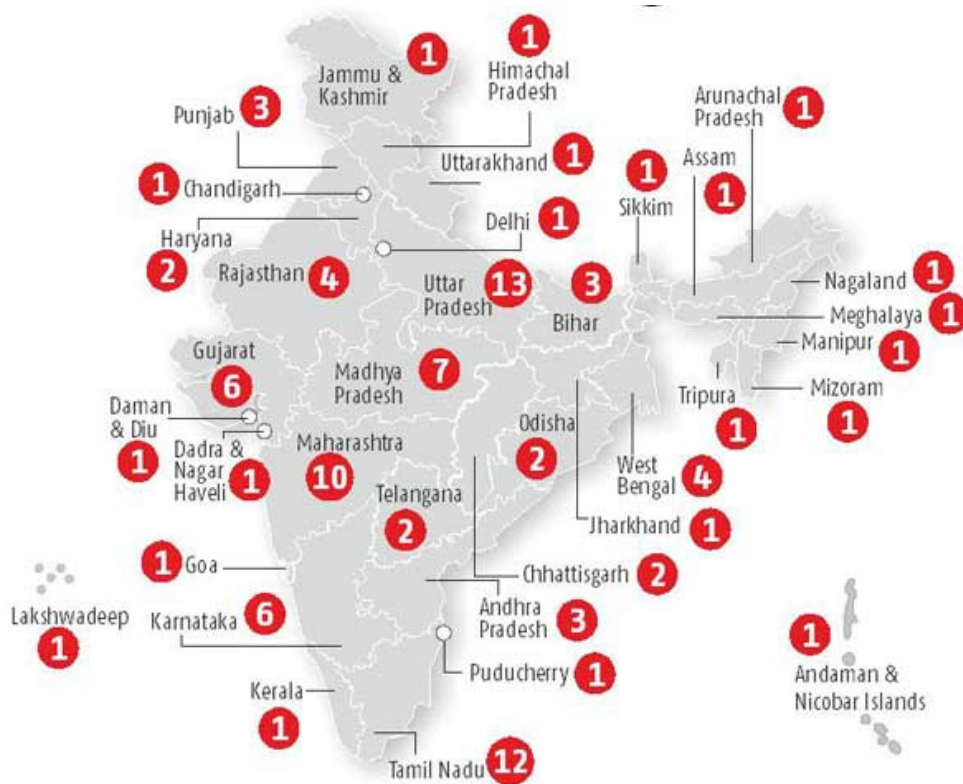
Two key elements of the 'Smart Cities' mission

1

Local Area Development	Minimum Area Requirement	Example
■ Greenfield	250+ acres	A GIFT City
■ Retrofitting	500+ acres	B Bandra Kurla Complex
■ Redevelopment	50+ acres	C Bhendi Bazaar, Mumbai
Pan-City	<ul style="list-style-type: none"> ■ Across the entire city 	<ul style="list-style-type: none"> ■ Transportation and traffic congestion ■ Affordable housing ■ 24x7 water ■ Sewerage and storm water ■ Security ■ Solid waste management ■ Energy

2

Indian Scenario – Top 100 Cities



Major Smart elements

Smart Parking



Wi-Fi



Citizen App



Smart lighting



Surveillance



Command Control



Smart Energy



Smart Mobility Interactive Digital Interface



Indian Scenario – Top 20 Cities



Major Smart elements

Smart Parking



Wi-Fi



Citizen App



Smart lighting



Surveillance



Command Control



Smart Energy



Smart Mobility Interactive Digital Interface

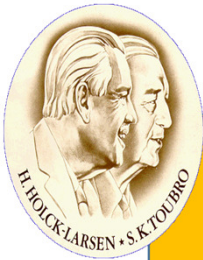




Smart World & Communication BU



About Larsen & Toubro



One of the largest and most respected Indian Multinational Company



Headquartered in Mumbai, India



Revenue FY 14-15: US \$ 15 Billion



Global Presence : India, US, UK, Canada, Russia, Japan, Europe, China & Middle-East



Factories : 30 nos. at 23 Locations in India, 7 nos. at 5 Location outside India



Henning Holck-Larsen

(4.7.1907 - 27.7.2003)



Soren Kristian Toubro

(27.02.1906 - 4.3.1982)



Smart World & Communication BU

Integrated Security Solutions

- City Surveillance
- Traffic Management System
- Security of Critical Infra
- Coastal Security



Communications and Telecom Infrastructure

- Fiber Optic Backbone
- Microwave & Satellite Communication System
- Fiber Management System
- IP Transport / Network Infrastructure
- Emergency Response System



Smart Infrastructure

- Integrated Command & Control
- Smart Communication
- Smart Mobility
- Smart Energy
- Smart Lighting
- Citizen Apps



Innovation Partner Network

Domain	External Partners
ICT	
Wi-Fi	
Smart Parking	
Smart Transportation	
Other Smart Solutions	



1

Security Solutions



Video wall



PTZ Camera



Fixed Camera



Datacenter

Commissioned Sabarmati Jail Surveillance Project, Ahmedabad

Executing "CCTV-based Surveillance System for Mumbai City" Project- Largest of its kind in India



CCTV & Number Plate Cameras

- Approx. 6000 Cameras (1500 locations)

Data Centers

- 2 Data Centers (Active – Active)

Command/ Viewing Centers

- 3 - Command & Control Centers

Vehicle Tracking System

- Vehicle Tracking for 1000 Vehicles

Collaborative Monitoring

- Receiving video feeds from 100 establishments

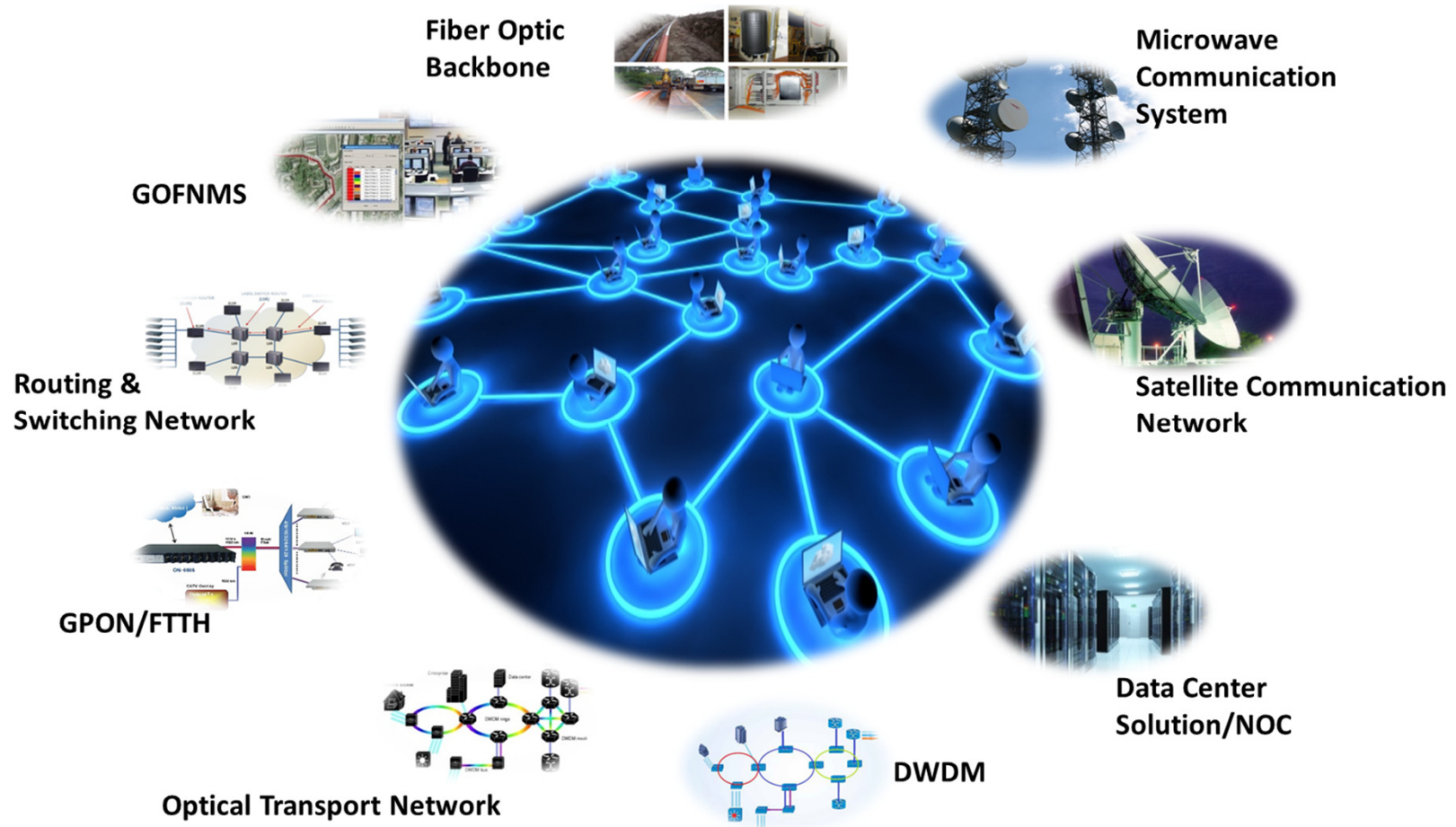


Commissioned "City Surveillance & Intelligent Traffic Management System" Project - 3 Cities of Gujarat



2

Communication Network & Telecom Infrastructure



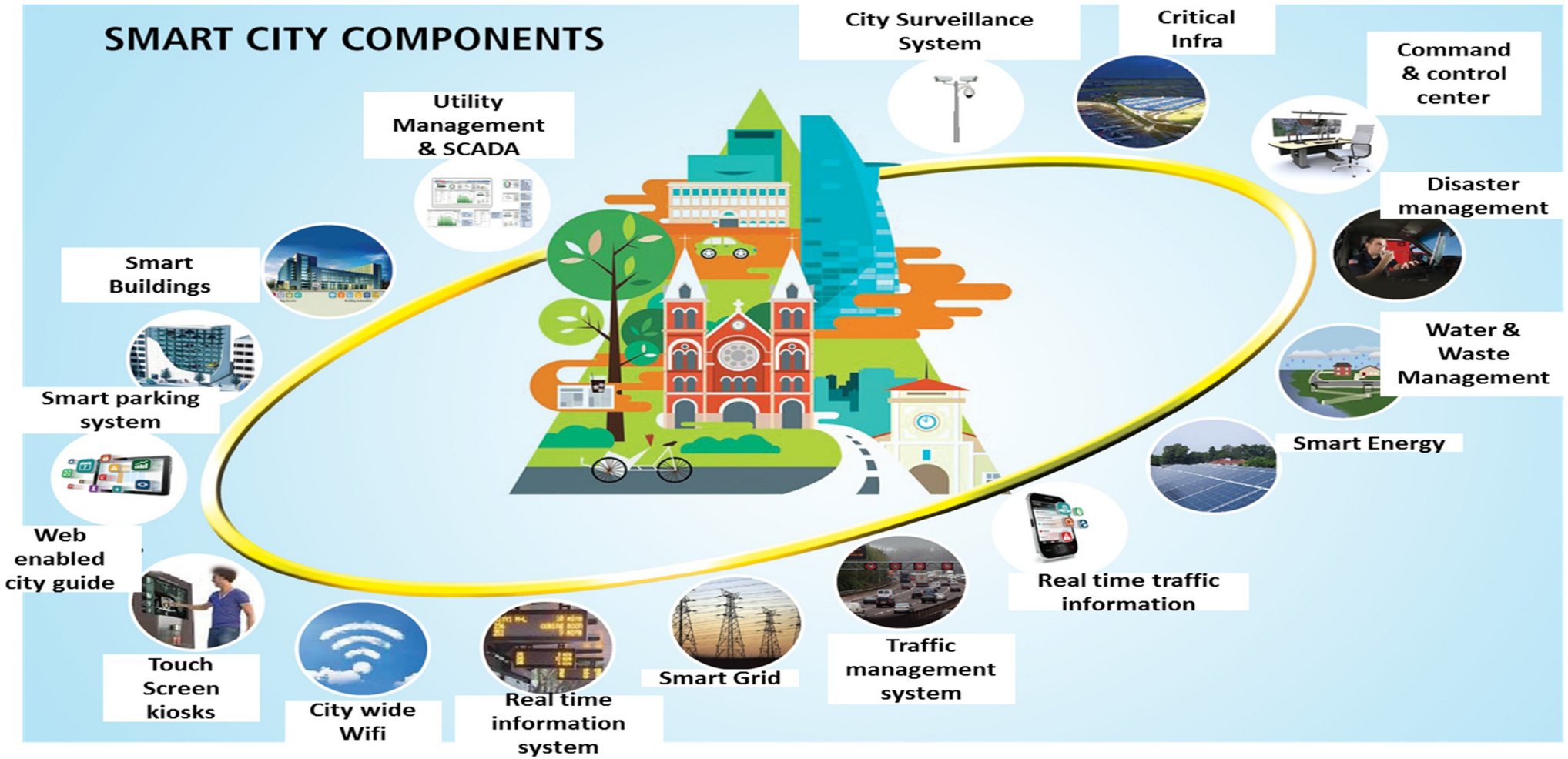
Participation in Communication Infrastructure Projects under NFS and NOFN



3

Smart Infrastructure

SMART CITY COMPONENTS





Track Record



Jaipur – First Smart City

Surveillance Solution

150 Cameras at 20 Locations

Public Wi-Fi

250 Access Points at 30 Locations

Interactive Kiosks

13 Locations

Remote Expert Government Services (REGS)

2 Locations

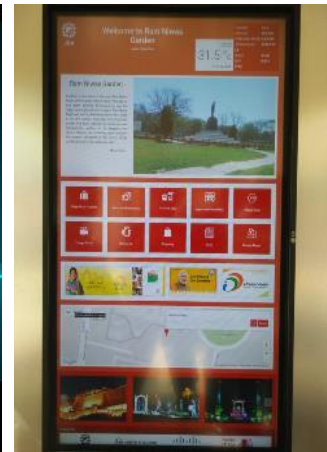
Parking Information System

5 Locations

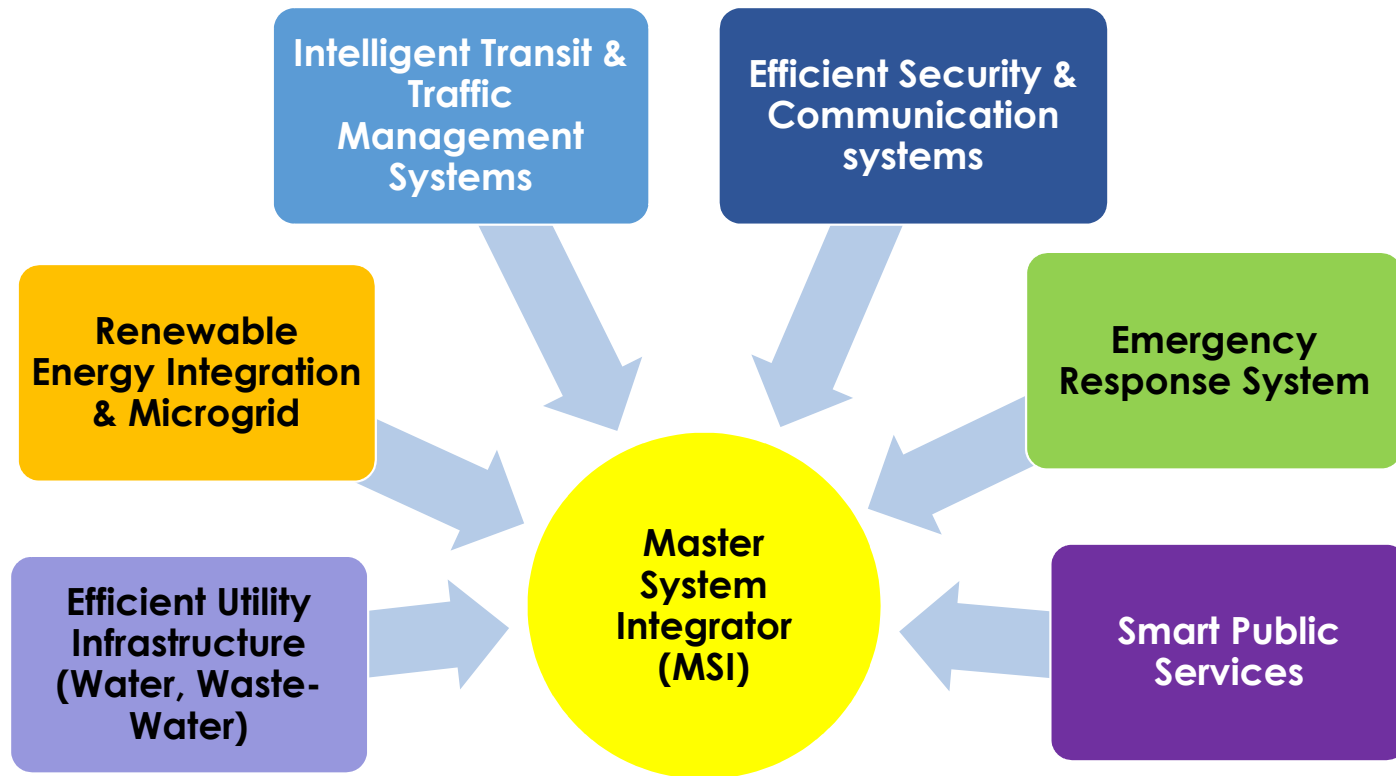
Environmental Sensors

15 Locations

Central Command Control Center



L&T as MSI

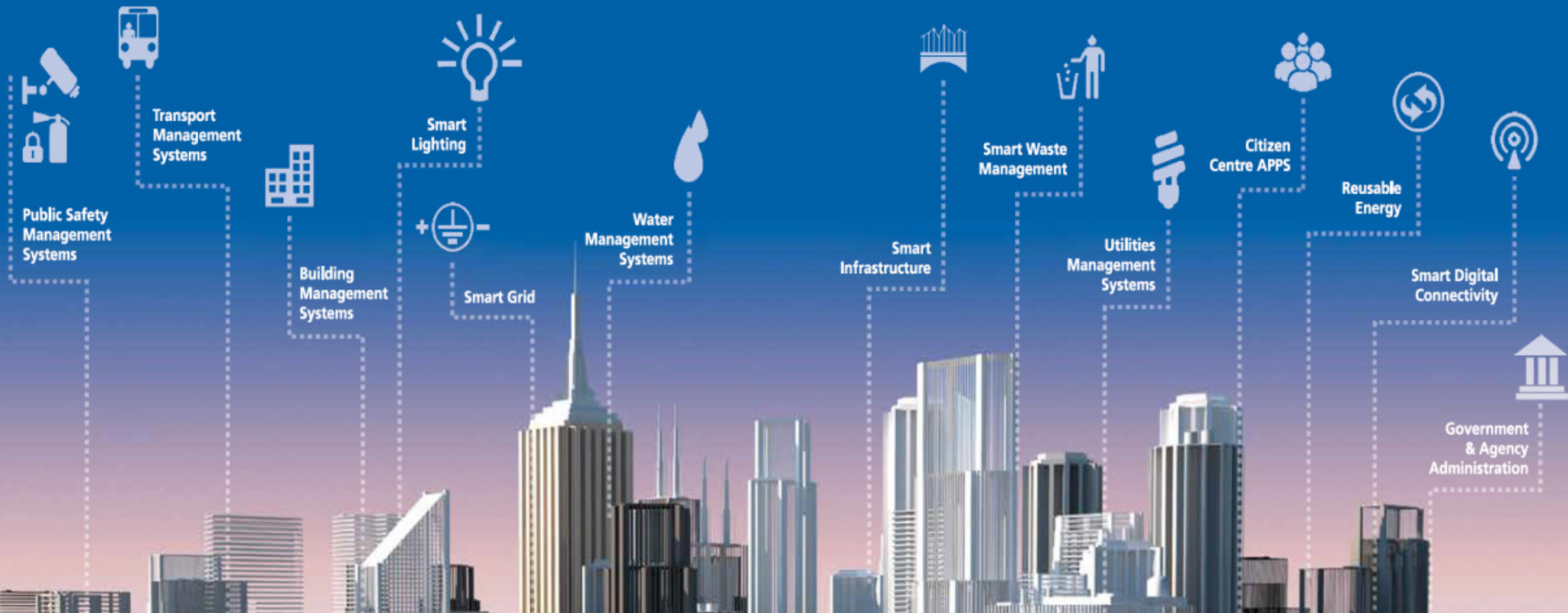


A smart city is a community that is efficient, livable, and sustainable and these elements go hand-in-hand

SECURITY SOLUTIONS

SMART CITIES

COMMUNICATION



THANK YOU