

Smart City Mission: Integrated Command and Control Centre



NATIONAL WORKSHOP FOR

PROJECT MANAGEMENT CONSULTANTS OF SMART CITIES

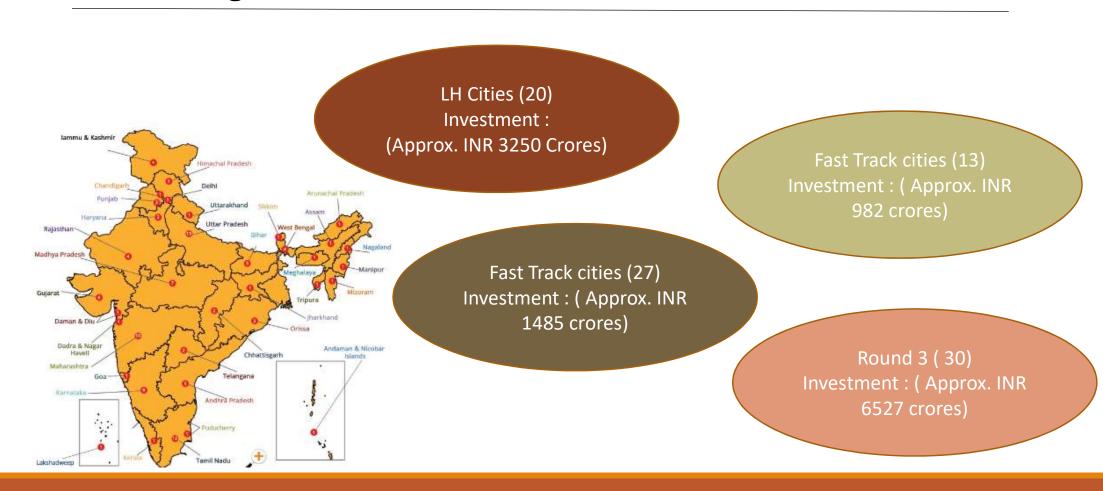
Date: 30TH OCT 2017

Venue: INDIA HABITAT CENTER, NEW DELHI





90 Winning SCP for Smart ICT Investments



Pune, Surat, Rajkot, Naya Raipur, Ahmedabad, Visakhapatnam, Bhubaneswar, Indore, Jabalpur, Kakinada, Bhopal, Nagpur, Jaipur,



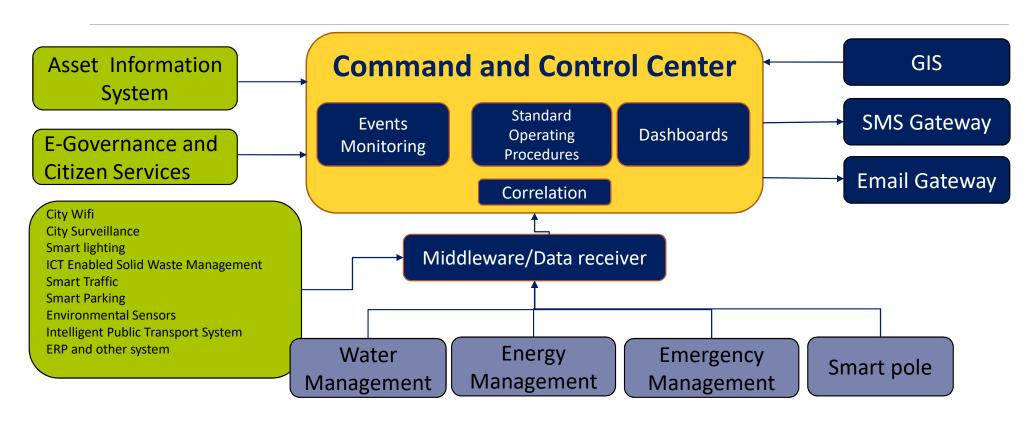
RFP's STATUS:

Total RFP Released: 26

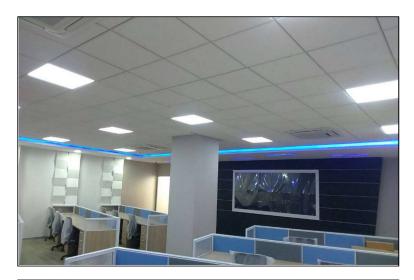
Tender Settled: 20

CCC Architecture Overview





Central Data center with Data Recovery





Pune Command and control Center Actual



Kakinada Proposed Command and control Center





Surat Command and control Center Actual

Command & Control Centre



COMPARATIVE ASSESSMENT OF SMART COMPONENTS

NAGPUR

OFC
CITY WIFI
CITY SURVEILANCE
STREET LIGHTING/ POLES
ICT ENABLED SWM
SMART TRAFFIC
ENV. SENSORS
CITIZEN SERVICES
SMART STRIP

VIZAG

OFC
CITY SURVEILANCE
STREET LIGHTING/ POLES
ICT ENABLED SWM
ENV. SENSORS
CITY TRANSPORT SYSTEM
ERP
PA SYSTEM
SMART BILLBOARD/ VMD

JAIPUR

CITY WIFI
CITY SURVEILANCE
STREET LIGHTING/
POLES
SMART PARKING
ENV. SENSORS
CITIZEN SERVICES/
KIOSKS

KAKINADA

OFC
CITY WIFI
CITY SURVEILANCE
STREET LIGHTING/ POLES
ICT ENABLED SWM
SMART TRAFFIC
SMART PARKING
ENV. SENSORS
CITIZEN SERVICES
ERP; PA SYSTEM; VMD

BHUBANESWAR

OFC
CITY WIFI
Intelligent traffic
management
ERP,Smart pole
E-GOV
Smart Parking
Smart solid waste
management
Smart Traffic, Env Sensor

AHMEDABAD

CITY WIFI
CITY SURVEILANCE
STREET LIGHTING/ SMART
STREET POLES
CITY BUS TRANSPORT
SYSTEM/ VMS
PA SYSTEM

PUNE

OFC
CITY WIFI
CITY SURVEILANCE
SMART TRAFFIC
PA SYSTEM
ENVIRONMENTAL
SENSORS

BHOPAL

CITY WIFI
CITY SURVEILANCE
STREET LIGHTING/
POLES
ENV. SENSORS
CITIZEN SERVICES
SMART BILLBOARD
ELECTRONIC
VEHICLE CHARGING

RAJKOT

STREET LIGHTING/ POLES
ICT ENABLED SWM
SMART TRAFFIC
SMART GRID
SMART WATER/
WASTEWATER
MANAGEMENT
SMART HEALTH
GIS

VADODARA

SOLID WASTE
MANAGEMENT,
SMART WATER
PUBLIC TRANSPORT,
INTELLIGENT POLE
ITS, DISASTER
MANAGEMENT SYSTEM
GIS SYSTEM
ALL ABOVE INTEGRATION



Smart City Mission: Integrated Command and Control Centre



How to fast track ICCC projects





What we did:

Analyze the SCP Study of technology **Bidder Selection Payments terms** proposals standards criteria **Identify key ICT Smart features Key ICT infrastructure** Brainstorming Selection criteria solution requirement required under sessions requirement identification in each domain various domains Request for proposal for Selection of About the [Authority], Government of [State]
 Introduction to [City] Smart city Project.
 RFP Format. System Integrator for Implementation of [City] Smart City Solutions Pre-bid meeting & Clarifica Volume 1: Instruction to Bidders **MODEL RFP for SI** Customization based on city requirement **Selection process for SI Pre-Bid query Bid Evaluation** Selection of SI **RFP Release** clarification



MSI MODEL RFP : ICT components

Key Features:

- Technology neutral and vendor independent
- Performance linked features like payment plan, Outcome based schedule
- Integrated and scalable solutions provisioning
- Optimum use of resources like sharable infrastructure
- Qualification criteria suggestion for batter technology evaluation
- RFP vetted and reviewed by C-DAC and DEITY

Smart Solutions

- City back bone Network
- City Wifi
- City Surveillance
- Smart lighting
- ICT Enabled Solid Waste Management
- ❖ Smart Traffic
- Smart Parking
- Environmental Sensors
- City Bus Intelligent Transport System
- Smart Governance and Citizen Services

Key ICT components

- Datacenter
- Disaster Recovery site
- High availability of DC
- Integrated Command and Control Center



Key Benefits of MSI (Master System Integrator)

- Single interface for multiple solutions implementation
- Integrated and scalable infrastructure solution considering all solutions applicable by single SI
- Ease in project execution, coordination and monitoring
- Control on MSI for meeting project timeline
- Same SI for O&M for batter result with reduced dependencies
- Outcome based payment plan will help in fast and efficient execution



What Cities need to do now???

- Study the Model RFP document
- Customize it as per city requirement
 - Bidders qualification
 - Scope of Work
 - Procurement process
- Add/edit smart solutions as per city requirement
- Fill-up the Annexures attached with Model RFP(Add/Edit as required)
- Release RFP

Support from MoHUA TEAMS:

- Understanding of Model RFP document
- Suggestion on smart solutions may be incorporated
- Support in evaluation on MSI if needed



Annexures

Annexure I: Indicative list of City Wifi Locations

SI. #	Area within the city	Wifi Locations in the area

Annexure II: Indicative List of City Surveillance Locations

a. Name of police station and locations

SI.	Name of police station	Location	CCTV Camera (PTZ)	CCTV Camera (Fixed)
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Annexure III: Solution Requirement - Locations:

S. No.	Solution Requirement	Indicative no. of locations
1	PTZ + Fixed Box Camera (including Critical Locations)	
2	Automatic Number Plate Recognition	
3	Red Light Violation Detection	
4	Public Address System	
5	Variable Messaging	
	Thermal Camera	
	Facial Recognition System	

Annexure IV: Indicative length of City Network Backbone

Details on City Network Back bone

SI. #	Area within the city*	Length of the network to be laid
		Total (KM)

^{*} Enclose a map showing area and alignement of network to be laid

Annexure V: Proposed locations for Zone aggregation points

SI. #	Location	Approximate Coordinates

^{*} This would be an indicative list of locations, SI is expected to carry out an independent assessment and propose for same or different locations for housing the zone level aggregation points. Ward Aggregation points are expected to be identified by SI.

Annexure VI: Indicative list of Environmental Sensors installation locations

SI. #	Indicative list of Environmental sensors installation Locations
5-4-3-2-2	

Annexure VII: Locations for Smart Lighting

SI. #	Locations of smart lighting (number and location)

Annexure X: Information on City Bus Services

A. Category wise fleet size

SI. #	Fleet Size

B. Number and Location of Bus stops (alongwith Map)

SI. #	Bus Stops Locations

C. Location of Bus depots (alongwith Map)

SI. #	Bus Stops Locations	

CHECK LIST



S.No	Key considerations	Technical /Commercial / General
1	Keep RFP Technology / Vendor Neutral	Technical
2	Propose outcome based solution with clear deliverable	Technical
3	Site survey + As is details - accurate as far as possible+ Stake holders MoU	Technical
4	Encourage more number of industry participation	General
5	e-gov /Deity/ Cyber security Guidelines to be followed	Technical
6	Prepare RFP keeping in mind Min no. of possible Pre bid queries (Incorporate Maker/Checker)	General
7	Try for No Addendum post pre-bid (unless extremely necessary) so pl take enough care during RFP preparation	General
8	PQ+ Consortium to be clearly defined in the RFP	Commercial
9	Command center Space Sizing- Keeping future growth and application in Mind	Technical
10	Try to use the city existing Resources/DPRs as far as possible	Technical

CHECK LIST..contd



S.no	Key considerations	Technical /Commercial / General
11	Explore leaseing of Network ,DC,DR	Technical
12	SLA to be clearly defined- for deploying manpower+ implementation phase+ O&M	Commercial
13	Penalty 10% or more - to be defined by city	Commercial
14	Remove Gartner/IDC/Forrester/Pink Verify etc	General
15	Acronyms - to be defined clearly where applicable	General
16	Operation team selection with Stringent SLA - key to success	
17	Operation team selection with Stringent SLA - key to success Note: Please include following clause in RFP under each technical requirement of the items being procured "The specifications provided in te RFP are indicative & carry guiding rule. The MSI is free to offer products & solutions which meet requirements of RFP focusing on the outcome, future scalability, security, reliability and adherence to specified SLA under this RFP, in line with applicable standards & best practices adopted in the industry) The MSI is encouraged to design an Optimised solution which is technically superior, innovative, proven, better in terms of functionality and is cost effective. Any specified parameters mentioned in the scope/technical requirement in the RFP may be considered if it is required for meeting current & future requirements during the contract period. The MSI is fully responsible for the specified outcome to be achieved.	

Q & A