

**INDIAN SMART CITIES PROGRAMME FOR 100 CITIES ON INTERNATIONAL STANDERD, PROSPECTIVES & CHALLENGES****K. K. JAIN FIE\*, Dr D. P. KOTHARI, Dr J. PRAVEEN**

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**DOI:** 10.5281/zenodo.55964**KEYWORDS:** ISO 37120, Smart Cities (100), Selected 20 No Incompetitions In 2019**ABSTRACT**

Smart city mission in India is of several major development program focused on Indian rapid growth and its challenges & opportunities. The aim is to promote economic growth, stronger governance to improve quality of life. Government of India recently pledged to create 100 new smart cities in India phased wise. On the basis of an international slandered ISO 37120. Smart cities councils of India is prime consultants for this work. There are many challenges ahead in implementation and there innovative solutions. Smart Cities Challenge isa competition designed to inspire to support municipal offices as they develop smart proposals to improve residents lives in year 2015 JULY. 97 cities competed in 1st round with best proposals receiving funds from ministry of Urban Development. .FOR funding. Out of 97 cities 20 were selected for best proposals. They will be receiving funds remaining cities entered in fast track program to up great their proposals. And will compete in next cycle. In June –July 2016. Currently 31% Indian populations are residing in cities. And expected that it would be 50 % by 2030. Here we shall discuss the international standards and how it would be implemented? Many countries including U.K. has expressed their desire to help India financially and technically. Bristol university s is talking leading roll in this matter. They are going to drive innovation \*we creating an environment. In a year or two world will look towards Bristol for future of smart cities.

**INTRODUCTION****SMART CITY CHALLENGE**

at Given the challenges involved in developing 100 smart cities, only the capable cities will be chosen under the Smart Cities Mission through a two-stage competition. This was indicated in the Operation Guidelines for Smart Cities Mission released by Prime Minister Narendra Modi. The selection criteria used in both the stages of competition was elaborated in the Guidelines.

In the Stage-1 of City Challenge Competition, each State and Union Territory scored all their cities based on a set of criteria and nominated the top scorers as per the indicated number of potential smart cities for participation in the Stage-2 of competition.

**Stage 1 of Selection**

The list of nomination marked the first stage in the selection process of smart cities, in which the state governments nominated potential cities and the Centre shortlisted 100.

The evaluation criteria for Stagel of competition within the State/UT was as below:

1. Existing Service Levels (25 points): This includes Increase in service levels over Census 2011, an operational Online Grievance Redressed System, Publication of least first monthly newsletter and online publication of municipal budget expenditure details for the last two financial years on website.
2. Institutional Systems and Capacities (15 points): This covers imposition of penalties for delays in service delivery and improvement in internal resource generation over the last three years;
3. Self-financing (30 points): This would be reflected in payment of salaries by urban local bodies up to last month, Auditing of accounts up to FY 201213, Contribution of internal revenues to the Budget for



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201415 and Percentage of establishment and maintenance cost of water supply met through user charges during 201415.

4. Past track record (30 points): Percentage of JNNURM projects completed which were sanctioned till 2012, Percentage of City level reforms achieved under JNNURM and extent of capital expenditure met from internal resources.

### Stage 2 of Selection

The Government on 27 August 2015 released the list of nominees for the ambitious smart city project. The list comprises 98 cities, including many state capitals.[5]

Proposal Level Evaluation (70 points)

1. Impact of proposal: To what extent the proposal is inclusive in terms of benefits to the poor and disadvantaged, Extent of employment
2. cost effectiveness of the proposal, firming up of resources required from various sources, Provision for Operation & Maintenance Costs, IT interventions to improve public service delivery.
3. Innovation and Scalability: Extent of adoption of best practices in consultation with citizens, Applicability of project to the entire city, Adoption of smart solutions and Pan city developments
4. Processes. generation, Articulation of quantifiable outcomes based on citizen consultations, Impact on environment etc.

### Cost effectiveness of Smart City Plan: Application of smart solutions for doing more with less of resources, Alternatives considered to enhance List of Smart Cities by State

98 projected smart cities by state.[6][7][8]

S. No.	Name of State/UT	Names of Cities Shortlisted
1	<u>Maharashtra</u>	<u>Greater Mumbai, Thane, Kalyan-Dombivali, Navi Mumbai, Nashik, Amravati, Solapur, Nagpur, Pune, Aurangabad</u>
2	<u>West Bengal</u>	<u>New Town Kolkata, Bidhannagar, Durgapur, Haldia</u>
3	<u>Gujarat</u>	<u>Gandhinagar, Ahmedabad, Surat, Vadodara, Rajkot, Dahod,</u>
4	<u>Madhya Pradesh</u>	<u>Bhopal, Indore, Gwalior, Jabalpur, Satna, Ujjain, Sagar</u>
5	<u>Tamil Nadu</u>	<u>Madurai, Tiruchirapalli, Chennai, Tiruppur, Coimbatore, Vellore, Salem, Erode, Thanjavur, Tirunelveli, Dindigul, Thoothukudi,</u>
6	<u>Karnataka</u>	<u>Mangalore, Belgaum, Shimoga, Hubballi-Dharwad, Tumkur, Davangere</u>
	<u>Kerala</u>	
	<u>Telangana</u>	
	<u>Andhra Pradesh</u>	
	<u>Uttar Pradesh</u>	
	<u>Rajasthan</u>	
	jaipur	



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Jaiur,  
Udaipur, Kota,  
AjmerJaiur,  
Udaipur, Kota,  
AjmerPunjab

Bihar  
Haryana  
Assam  
Odisha      Ludhiana, Jalandhar, Amritsar  
Himachal  
Pradesh      Muzaffarpur, Bhagalpur, Biharsharif  
Uttarakhand      Karnal, Faridabad  
Jharkhand      Guwahati  
Sikkim      Bhubaneshwar, Rourkela  
Manipur      Dharamshala  
                    Dehradun  
                    Ranchi  
                    Namchi  
                    Imphals

Vishakhapatnam, Tirupati, Kakinada  
Moradabad, Aligarh, Saharanpur, Bareilly, Jhansi,  
Kanpur, Allahabad, Lucknow, Varanasi,  
Ghaziabad, Agra, Rampur



22	<u>Andaman and Nicobar Islands</u>	<u>Port Blair</u>
23	<u>Arunachal Pradesh</u>	<u>Pasighat</u>
24	<u>Chandigarh</u>	<u>Chandigarh</u>
25	<u>Chhattisgarh</u>	<u>Raipur, Bilaspur</u>
26	<u>Dadra and Nagar Haveli</u>	<u>Silvassa</u>
27	<u>Daman and Diu</u>	<u>Diu</u>
28	<u>Delhi</u>	<u>Delhi (NDMC)</u>
29	<u>Goa</u>	<u>Panaji</u>
30	<u>Lakshadweep</u>	<u>Kavarrati</u>
31	<u>Meghalaya</u>	<u>Shillong</u>
32	<u>Mizoram</u>	<u>Aizawl</u>
33	<u>Nagaland</u>	<u>Kohima</u>
34	<u>Puducherry</u>	<u>Oulgaret</u>
35	<u>Tripura</u>	<u>Agartala</u>

- Jammu and Kashmir have asked for more time to decide on the potential smart city.
- 12 cities have been shortlisted from Uttar Pradesh against 13 cities allocated to the stat

#### LIST OF 20 SMART CITIES SELECTED IN FIRST ROUND]

##### S. No. Name of State/UT Names of Cities Shortlisted

1	<u>Odisha</u>	<u>Bhubaneswar</u>
2	<u>Maharashtra</u>	<u>Pune</u>
3	<u>Rajasthan</u>	<u>Jaipur</u>
4	<u>Gujarat</u>	<u>Surat</u>
5	<u>Kerala</u>	<u>Kochi</u>
6	<u>Gujarat</u>	<u>Ahmedabad</u>
7	<u>Madhya Pradesh</u>	<u>Jabalpur</u>
8	<u>Andhra Pradesh</u>	<u>Visakhapatnam</u>
9	<u>Maharashtra</u>	<u>Sholapur</u>
10	<u>Karnataka</u>	<u>Bangalore</u>
11	<u>Madhya Pradesh</u>	<u>Indore</u>
12	<u>New Delhi</u>	<u>New Delhi</u>
13	<u>Tamil Nadu</u>	<u>Coimbatore</u>
14	<u>Andhra Pradesh</u>	<u>Kakinada</u>
15	<u>Karnataka</u>	<u>Belagavi</u>



16	<u>Rajasthan</u>	<u>Udaipur</u>
17	<u>Assam</u>	<u>Guwahati</u>
18	<u>Tamil Nadu</u>	<u>Chennai</u>
19	<u>Punjab</u>	<u>Ludhiana</u>
20	<u>Madhya Pradesh</u>	<u>Bhopal</u>

## **ISO 37120 BRIEFING NOTE: THE FIRST ISO INTERNATIONAL STANDARD ON CITY INDICATORS**

### **Sustainable development in communities: City indicators for service delivery and quality of life**

Currently 70 percent of global GDP is now generated by cities and 53 percent of the total world's population resides in cities. It is estimated that 70 percent of the world's population will be living in cities by 2050. This means the role of cities in enabling more sustainable futures is now more important than ever. Cities are the cultural and economic centers of the world whose progress depends upon effective management and evidence-based policy making.

In this age of urbanization, city indicators can be used as critical tools for city managers, politicians, researchers, business leaders, planners, designers and other professionals to help ensure policies are put into practice that promote livable, tolerant, inclusive, sustainable, resilient, economically attractive and prosperous cities globally.

### **WHY THIS INDICATOR IS IMPORTANT.**

Cities need indicators to measure their performance for improving quality of life and sustainability globally. Existing indicators are often not standardized, consistent, or comparable over time or across cities. As part of a new series of International Standards being developed for a holistic and integrated approach to sustainable development and resilience under ISO/TC 268, *Sustainable development of communities*, ISO 37120 establishes a set of standardized indicators that provide a uniform approach to what is measured, and how that measurement is to be undertaken. This International Standard does not provide a value judgment, or numeric thresholds on what a particular city should choose as appropriate targets for the indicators.

This International Standard defines and establishes definitions and methodologies for a set of indicators to steer and measure the performance of city services and quality of life. Indicators.

### **Standardized Indicators**

1. Energy
2. Environment
3. Recreation
4. Safety
5. Shelter
6. Solid waste
7. Telecommunications
8. and innovation
9. Finance
10. Fire and emergency
11. response
12. Governance
13. Health
14. Transportation
15. Urban planning
16. Wastewater
17. Water and sanitation



## DEFINATION OF SMRAT CITY

Smart cities are those cities which have smar (intelligent), Physical, Social, Economical Infrastructure while ensuring centrality of citizens in a sustainable environment. It is expected that such a smart city will generate options for all residents to peruse their lively hoods and interests meaning fully and with joy.

## TARGETS OF SMART CITIES IN INDIA

1. Travel time of max.30 minutes in Small& medium size cities and 45 minutes in METRO cities.
2. Unobstracled foot path at least two meters wide on either sides of all streets with ROW
3. Round the clock .water supply with 135 liters/per person

## PILLERS OF SMART CITY

**Institutional Infrastructure** (including Governance. The current governance structures do not focus on citizen participation. People do not get the feel of ownership of city. Therefore, there is a need for involving citizens in decision-making processes. Procedures are cumbersome and citizens often find it difficult to secure public services they seek. Further, responsibilities for different services are fragmented across multiple institutions, making the situation even more complex for any citizen. Besides, many of these institutions report to different departments of the State government and local bodies have little influence on them. For example, even within the transport system, metro rail, buses, roads, parking, traffic lights, street lights, etc. are dealt with by different institutions/ department.

**Physical Infrastructure** refers to its stock of cost-efficient and intelligent physical infrastructure such as the urban mobility system, the housing stock, the energy system, the water supply system, sewerage system, sanitation facilities, solid waste management system, drainage system, etc. which are all integrated through the use of technology..

### **Economic Infrasructure**

For a city to attract investments and to create the appropriate **economic infrastructure** for employment opportunities, it has to first identify its core competence, comparative advantages and analyze its potential for generating economic activities. Once that is done, the gaps in required economic infrastructure can be determined. This would generally comprise the following:

- Incubation centers
- Skill Development Centers
- Industrial Parks and Export Processing Zones
- IT / BT Parks
- Trade centers
- Service Centres
- Financial Centers and Services
- Logistics hubs, warehousing and freight terminals

### **Social Infrastructure**

Relate to those components that work towards developing the human and social capital, such as the education, healthcare, entertainment, etc. It also includes performance and creative arts, sports, the open spaces, children's parks and gardens.

These together determine the quality of life of citizens in a city. It is also necessary that city promotes inclusiveness and city has structures which proactively bring disadvantageous sections i.e. SCs, STs, socially and financially backwards, minorities, disabled

## FINANCIAL STUCTURE FOR SMART CITIES



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1. 60% FUNDS will be allocated for investment in infrastructure
2. 10 % For E –Governance initiative
3. 30 % Remaining funds will be inform of Equity from PPP

### Funds Requirements By Sectors

TOTAL=G B P -384 Bn=383/06= 640 Bn US DOLLORS

- 1) Urban roads –44.1 %
- 2) Mass Transit---11.5 %
- 3) Renewal l& Redevelopment-10.4%
- 4) Water supply ---8.2 %
- 5) Sewerage-----6.2 %
- 6) Strom Water Drainage –4.9 %
- 7) Traffic Support INF –2.5%
- 8) Solid Waste Management 1.2%
- 9) Street lighting ---0.5 %
- 10) Others -----10.5 %
- TOTAL-----100 %

### FOREIGN COUNTRIES / ORGANIZATIONS COLLAORATING WITH INDIA ON SMART CITIES PROGRAMME

1. US -Private investment in partnership GBP-25 Bn-in clean water &Solid Waste Management in 500 cities.
2. JAPAN –GBP 22Bn Mix of Private & Public investments
3. CHINA –GBP-12 Bn do---
4. GERMANY---7 Bn Solar city projects for 10 yrs
5. FRANCE- 1.5 Bn IN Development of 3nos smart city projects INCLUDING PUDUCHERRY ,NAGALAND,ETC
6. ADB )Asian Dev.Bank –Industrial Zone of AP.& Karnataka GBP 39 Mn
7. DUBAI-KEEN TO INVEST IN GREATER HYDERBAD.

### INDIAN COMPANIES PARTICIPATING IN SMART CITY PROJECTS

- 1) L & T LMT
- 2) IL&LS lmt
- 3) Fair Wood Grooup
- 4) Town ship & Urban Associan lmt
- 5) Pennusula land lmt
- 6) Tata Reality & Infrastructure l

### CONCLUSION

Due to great efforts of the PM this smart city program for 100 cities will take minimum 20 yrs But 20 smart cities are proposed to be developed in next five yrs .along with clean India.Close monitoring of projects are required task force have been set up for monitoring AJMER (RAJ) ,ALLAHBAD (UP) VISAKHAPATNAM SMART CITIES Consist of1)Divisional commissioner2.)Ajmer Developent authority – chairman 3) distt collector Ajmer,4) Administrator of Ajmer Infrastructure 5) Mayor 6)MCA 7) JOINT SECRETARY UD8) GOI USTDA This will create opportunities for development of Indian economy.

### REFERENCES

1. WWW.CEA.GOV IN
2. WWW.INDIA\*S SMART CITY PROGRAM.
3. WWW. ADOPTION OF ISO FOR SMART CITIES IN INDIA
4. WWW.FUNDING FOR SMART CITIES
5. International Standard for smart cities INDICATOR ISO 37120s

