No.K-15016/61/2015-SC-1
Government of India
Ministry of Urban Development

Nirman Bhawan, New Delhi
Dated: 14th September, 2015

OFFICE MEMORANDUM

Subject:- Smart City Proposal (SCP) template.

After completion of Stage-1 of the Smart Cities Challenge, States/ULBs have to prepare for the Stage-2 of the Competition. In accordance to para 9.1.2 of Smart Cities Mission (SCM) Guidelines, each of the potential 100 Smart Cities have to prepare their Smart City Proposals (SCP). Moreover, the SCP will be assessed on a set of fair, objective and transparent evaluation criteria (Annexure 4) by a Committee consisting of a panel of national and international experts, organisations and institutions (para 9.1.3)

2. In order to make the process of evaluation open, fair and transparent, a template for the SCP was developed and discussed in the break-out session on 26th June, 2015 attended by more than 150 stakeholders including State Govt. officials, Urban Local Bodies (ULBs), Urban Sector Experts and Research Institutions. Again, the Smart City Proposal Format/Template was also discussed with States/Cities in detail in the Regional Workshops held on 3rd, 7th and 12th September, 2015 in Delhi, Hyderabad and Kolkata respectively.

3. The Ministry of Urban Development (MoUD) has designed a standardised template for use of States/ULBs to prepare the SCP for submission in Stage-2 of the Competition. A copy of the SCP template is enclosed and may also be seen on Ministry's website (www.moud.gov.in). The SCP has to be submitted online and detailed instructions will be issued soon.

4. It is requested that the Smart City Proposal may be prepared strictly in accordance with the template and the timelines set for various activities adhered to.

Encl: As above

(Sanjay Sharma)
Under Secretary to the Govt. of India
Tel No. 23062742

To

All Principal Secretaries (UD/MA)/ Municipal Commissioner of Smart Cities.

Copy to:

Team Leader, Technical Cell, MoUD for taking action for uploading the same on the website of Smart Cities Mission.

INDIA SMART CITY MISSION
MISSION TRANSFORM-NATION

THE SMART CITY CHALLENGE
STAGE 2

SMART CITY PLAN & PROPOSAL
(SCP)

CONTENTS

	Glossary	2
A	Introduction	3
B	City Profile	5
C	Citizen Engagement	10
D	Vision & Sub-Goals	12
E	Strategic Plan	14
F	Pan-city Proposal	15
G	Area-based Proposal	17
H	Implementation Framework	19
I	Financing Plan	21
J	Benefits & Impacts	21
K	Process and Teamwork	22
	Annexures	23

NOTES

1. This document must be read along with the Smart City Mission Guidelines issued by the Ministry of Urban Development, Government of India. Guidelines are available on the website <smartcities.gov.in>
2. An electronic version of the Proposal format is also available on the website for starting the process of preparation. See: 'Downloads' > 'Memos'

GLOSSARY OF KEY TERMS

Goal:	A higher level result, i.e. a desired impact. The national level goals for the Smart Cities Mission are to provide core infrastructure, give a decent quality of life to citizens, promote a clean and sustainable environment and apply 'smart' solutions. (Guidelines 2.3)
Impact:	An examination of the wider long-term effects that the action contributes – social, economic, technical, environmental – to citizens, groups of people and institutions. Impact can be immediate and long-range, intended and unintended, positive and negative, macro and micro. Impact studies address the question: what real difference has the action made? How many residents have benefited from the Mission?
Purpose:	The overarching aim that the project seeks to achieve; the change in citizen conditions, systems, or institutional performance.
Outcome:	At the general objective level, these are the effects over the mid-term level (one to several years); these intermediate benefits are generated over time and are directly linked to the accumulated achievement of outputs
Output:	The actual deliverable; what the operation can be held accountable for producing; a short-term (achieved within a 12-month period), tangible result of interventions, actions or programme inputs
Activity:	The main activity that must be undertaken in order to accomplish the output; any process used to transform a combination of inputs/resources (human, information, material, financial) to achieve results (outputs, outcomes, impacts)
Inputs:	Budget by activity; monetary, physical and human resources required to produce outputs
Strategy:	Possible ways and approaches to achieve results, overcome constraints and capitalize on opportunities
Result:	A describable and/or measurable change in state – planned and unplanned – at the output, outcome, impact level, that can be attributed to an intervention

A. INTRODUCTION

In the imagination of any city dweller in India, the picture of a Smart City contains a wish list of infrastructure and services that describes his or her level of aspiration. To provide for the aspirations and needs of the citizens, urban planners need to aim at developing the entire urban eco-system, which is represented by the four pillars of comprehensive development — institutional, physical, social and economic infrastructure. This can be a long-term goal, but cities can work towards developing such comprehensive infrastructure and improving quality of life incrementally, adding on layers of 'smartness' through planned, inclusive and sustainable interventions.

Each city aspiring to be smart has to formulate its own concept, vision, strategy and plan (proposal) that is appropriate to its local context, resources and levels of ambition. Thus, each city will articulate its own model of Smart City – based on national and global models and best practices – such that it can answer the question: What kind of Smart City do you want and how will you achieve it?

The answer to this fundamental question will be contained in this Smart City Plan & Proposal (SCP), which is prepared using the principles of strategic planning and includes your city's vision, your area-based development plans and pan-city initiatives, your plan for mobilization of resources and ensuring that the city achieves the intended sub-goals, outcomes and impacts in terms of infrastructure up-gradation and smart applications that improve the quality of life and make the city inclusive and sustainable. The SCP is collaborative because the objectives and funds of all the citizens, government departments, parastatals and private agencies are dovetailed during the process of preparing the SCP.

The SCP must capture the logical flow of thinking that links the National Mission Goals with city-level sub-goals that are specific to the City. The SCP should identify the purpose/objective of the Area based developments and the Smart Solutions being applied in the Pan-City proposal, and identify the Results – consisting of Impacts, Outcomes and Outputs – of each project component (See Glossary). In sum, the SCP contains the story of transformative change that is being scripted by the citizens and local government of your city.

The Smart City Features (attributes) given in Annexure 1 will be used to locate the City sub-goals within the National goals. Annexure 1 contains the detailed descriptions of each of the above Smart City Features, along with references to relevant clauses in the Smart City Mission Guidelines. The 24 smart city features are given below:

1	Citizen participation	13	Intelligent government services
2	Identity and culture	14	Energy supply
3	Economy and employment	15	Energy source
4	Education	16	Water supply
5	Health	17	Waste water management
6	Mixed use	18	Water quality
7	Compactness	19	Air quality
8	Open spaces	20	Energy efficiency
9	Housing and inclusiveness	21	Underground electric wiring
10	Transportation & Mobility	22	Sanitation
11	Walkability	23	Waste management
12	IT connectivity	24	Safety

In Annexure 2, four scenarios are described for each smart city feature. Your city will select the scenario that most accurately reflects the existing conditions in the city. After citizen consultations (Refer Part C) the needs and the priorities of the citizens will be known. At the same time the results of the desk-work and city profile (Refer Part B) done by the consulting firms/handholding agencies will also be available to the city. A synthesis of the city profile and the citizen consultation will lead to the determination of the aspirations of the residents of the city. The aspiration will be described in column 'J' in Annexure 2 as the scenario that the city wants to achieve, and the most effective means to achieve the aspiration will be indicated in column 'K'. The aspirations of the city with regard to the 24 smart city features will provide guidance for articulating the Vision and Sub-goals of the city.

The strategy will be created through the combination of citizen consultations (eg. citizen driven solutions identified in Round 2 of citizen engagement; Refer Part C) with the adoption/adaptation of models/best practices from the list of appropriate Smart Solutions/Area-based 'Smart' developments in India and the World (prepared by consulting firms/handholding agencies), by separating specific aspects/elements from the models/best practices and combining these to create something new, etc.

The strategy will contain at least one Smart Solution in which ICT (Information & Communication Technology) is applied to bring about improvements in infrastructure and

services throughout the city (Pan-city). Smart Solutions provide one way to jump across several scenarios (eg. from Scenario 1 to Scenario 4; Refer Annexure 2) in a short time.

Another component of the strategy will be to transform existing areas (retrofit and redevelop), including slums, into better-planned ones, thereby improving the quality of life of the whole City. The strategy may also include proposals for new areas (green-field) that can be developed as well-planned and fully serviced settlements in order to accommodate the expanding population.

The pan-city and area-based components of the strategy will be seen as demonstrations of what is possible in your city. Ultimately, an area-based development is expected to find replication in other parts of the city (and to other cities); thus, the entire city has to be made ready for this transformation by providing basic services to all citizens. In order to envisage the comprehensive development of the city, complementary Missions such as AMRUT and Swachh Bharat will be converged and form part of the city-wide strategic plan (Refer Part E).

The transformation of your city in this way will improve quality of life, create employment and enhance incomes for all, especially the poor and the disadvantaged, leading to inclusive and sustainable Cities.

The contents of the Smart City Plan & Proposal (SCP) are described in detail in Parts 'B' to 'K' of this document. Each Part contains a number of questions, which must be answered as per the word limit and format provided for each question. There are 57 questions, numbered in sequence.

B. CITY PROFILE

Before any city can undertake the challenge of becoming a smart city, it must take stock of its ground realities and its potential for transformation. The more advanced its ability to diagnose its problems and potentials on the basis of data and insightful research and extensive citizen engagement, the more likely it is to achieve success. The analysis of information and data will provide the evidence that is needed to convince citizens, stakeholders as well as investors. The causalities and linkages between the sub-goals, objectives/impacts, outcomes and outputs will form a logical framework that can be used to monitor the impacts and to anticipate the risks and measures of success. The consulting firms/handholding agencies should prepare these

connections in simple, easily understandable language for citizen consultations. The consulting firms/handholding agencies should start with a comprehensive desk review.

Conduct a Desk Review of all information and data which can be harnessed from the Town/City Directory prepared by the Census of India and the National Sample Survey Organization as well as other surveys and data collected by various departments (eg. industries, social welfare, education, health, employment, etc.) and agencies (eg. public works, roads and transport, etc). It is recommended that you also review the previous/current development plans (city-level and site-specific) and the studies conducted for the preparation of the City Development Plan, City Sanitation Plan, City Mobility Plan and Master Plan and any other plans for the city or for specific areas of the city. Other sector specific or thematic plans can also be referred to add further depth to the proposal.

No baseline survey is planned or envisaged for the present. Your City Profile will include the following four components: Baseline Information, Key Performance Indicators, the Mapping of your city, and the City-level Self Assessment. These are described in further detail below.

BASELINE INFORMATION: In Stage 1 of this Smart City Challenge, during the process of being nominating by your State Government, you have reported the status of your city on the following 13 indicators and have achieved the scores indicated in Table 1 below.

TABLE 1

S. No.	Criteria	Total Score	Score obtained
1	Increase over Census 2011 or Swachh Bharat baseline on number of household sanitary latrines (whichever is less)	10	
2	Making operable Online Grievance Redressal System with response being sent back to complainant	5	
3	At-least first monthly e-newsletter published	5	
4	Electronically place project-wise municipal budget expenditure information for the last two financial years on the website	5	
5	Levy of compensatory penalty for delays in service delivery	5	
6	Collection of internally generated revenue (e.g. taxes, fees, charges) during the last three FYs (2012-15)	10	

7	Payment of salaries by ULB up-to last month	5	
8	Audit of accounts for FY 12-13	5	
9	Percentage contribution of tax revenue, fees and user charges, rents and other internal revenue sources	10	
10	Percentage of establishment and maintenance cost of water supply	10	
11	Percentage contribution of internal revenue sources (self- generated) used for capital works during FY 2014-15	10	
12	Percentage of City-level JnNURM Reforms achieved	10	
13	Percentage of completion of Projects sanctioned upto March, 2012 under JnNURM	10	
	Total	100	

The baseline information in Table 1 provided a quick assessment of the readiness and performance of your city government (Urban Local Body) and its ability to achieve the smart city sub-goals. However, the complete Profile of your city will emerge from a combination of the baseline information with additional information and data obtained from intensive desk review and citizen engagement.

KEY PERFORMANCE INDICATORS: The following Key Performance Indicators (KPIs) are particularly significant for measuring the capacity of the ULB to meet the expectations of the citizens:

1. In the last three years, how has the **Operational Efficiency** of public entities in your city changed in terms of the following indicators {Describe in max. 50 words each, mentioning the source of the data; words used to describe the source will not be counted}:
    a. Average time taken to give building plan approvals
    b. Increase in property tax assessments and collections
    c. Scheduled outages in a month
    d. Unscheduled outages in a month
    e. Reduction in NRW/UFW and AT&C/T&D losses
    f. Increase in percentage of population covered by grid based power
    g. Water & sewerage user charges collected as a percentage of current annual demand
    h. Property tax collection as a percentage of annual demand
    i. Cost management interventions like location tracking of vehicles, ambient light sensors, etc.
2. In the last three years, how has the **Traffic Situation** changed in terms of the following indicators {Describe in max. 50 words each, mentioning the source of the data; words used to describe the source will not be counted}:

a. Average traffic speeds
b. Average commute times and distances for different groups
c. Availability of pedestrian facilities
d. Availability of public transport
e. Congestion intensity on arterial city roads

3. In the last three years, what have been the changes in **Administrative Efficiency** due to the use of Information and Communication Technology (ICT) {Describe in max. 50 words each, mentioning the source of the data; words used to describe the source will not be counted}:
    a. Overall attendance of functionaries
    b. Two-way communication between citizens and administration
    c. Use of e-Gov to enable hassle free access to statutory documents
    d. Dashboards that integrate analytics and visualization of data
    e. Availability of basic information relevant to citizens
4. In the last three years, what has been the change in the **Availability of Affordable Housing**; i.e. through construction of new units for the EWS or the redevelopment of slums? {Describe in max. 100 words, mentioning the source of the data; words used to describe the source will not be counted}

MAPPING: Mapping of information and data is a crucial step in assessing the ground conditions in your city and in engaging with the citizens, who will be naturally oriented to the city in terms of their cognition of the city, which is determined by where they live and work and conduct other daily and occasional activities. Create a suitable Base Map of your city with all the relevant systems and networks as they exist today, showing its physical, administrative and other characteristics, such as natural features, heritage areas, areas prone to flooding, slums, etc. The base map should show the regional context in which your city is located and should contain the spatial and physical layout/morphology of your city, the street network, the open and green spaces, the geographical features and landmarks and the infrastructure, including for transportation, water supply, sewerage, electricity distribution and generation, and so on.

Using this base map, represent, with the most effective method available, as much information and data about your city as is considered vital/significant. Please note that the mapping will be a significant tool for identifying the areas that can be potentially taken up for area-based initiatives and development projects and for sharing these alternatives with the citizens during consultations. The effort should be to make this 'base map' as accurate and as complete as

possible, by anticipating the future needs as per the city profile, and by adding detail wherever necessary.

CITY-LEVEL SELF ASSESSMENT: Kindly complete and submit the City-level Self-Assessment (Annexure 2), which will assist you in articulating your city profile with reference to the Smart City Features described in Annexure 1. While the self-assessment defines "where you are today", the same form can also be used to indicate the aspiration: "where you want to be tomorrow." In Column 'H', please indicate the option that most closely describes your city. Add any relevant indicator or quantitative information that you may have in Column 'I'. Note that you will not be penalized if you do not have the corresponding quantitative information; however, you should make every attempt to obtain accurate and reliable information and data.

5. In the medium and long run, how will the City become 'smart' as set out in the aspirations described in Annexure 2? Describe a pathway for the city to become 'smart', containing: (i) status of core infrastructure elements in your city; (ii) application of possible Smart Solutions at the Pan-city level; and (iii) strategies that treat the area-based developments as precursors to a city-wide transformation. The description of the pathway will be like a hypothesis or proposition that you can share with the citizens during outreach and consultations. {Max. 500 words}

Your City Profile will now be reasonably complete. It takes into account the Baseline Information in Table 1, the Key Performance Indicators in questions 1-4 and the Mapping of your city. Based on this desk-based research, you should be able to prepare preliminary responses to the Columns 'H' and 'I' in the Self-Assessment sheet contained in Annexure 2, which will assist you in engaging with residents and stakeholders. You have also articulated a preliminary strategy in response to Question 5.

Note that the contents of Annexure 2 will be finalized after you have completed Round 1 of citizen engagement (Refer Part C). During consultations with citizens and stakeholders, you will refer to the City Profile and the partially completed self-assessment sheet, which will form the basis for identification and selection of the area-based developments and defining the strategy for development.

C. CITIZEN ENGAGEMENT

The process for planning the Smart City commences with the preparation of the City Profile and thereafter progresses to intense citizen engagement at multiple levels in the city using different means. This can involve better communication by government, soliciting feedback for problem identification, co-creating solutions and involving local citizen champions, while ensuring the active participation of various groups of people, such as youth and students associations, welfare associations, tax-payers associations, senior citizens, special interest groups, slum dwellers and others.

The profiling of the city is also the basis for selecting the appropriate techniques and the target groups for the engagement strategy. Demonstrating that a comprehensive engagement process has been conducted is a critical element of the Smart City application. Citizen engagement provides support for projects and reduces potential conflict by ensuring that projects meet the most urgent needs for communities. If the citizens are collectively supportive of an initiative or project, there is also a reduction of risk for the promoters and investors. Most significantly, citizen engagement provides the opportunity to co-create the smart city by identifying creative and innovative solutions to common urban challenges.

Process to Follow: The City Profile will assist you in guiding the citizen engagement towards a productive outcome, such that the deliberations are well-informed and moving towards consensus. You will be conducting citizen engagements at three critical stages of preparing your proposal, corresponding to three rounds of consultations:

- Round 1: To establish a city vision, city-level sub-goal and strategy to achieve objectives
- Round 2: To get feedback on your ideas for pan-city solution/s and area-based developments
- Round 3: To inform citizens about the intended pan-city solution/s and area-based development/s, the implementation and financing plans

Devise the most effective methods to ensure maximum and most productive participation of citizens at each stage of engagement and during each round. These will need to be timed perfectly and may run concurrently with your desk research and planning work. The effort should be to achieve maximum touch-points (public contact), to keep the deliberations well informed with evidence (information & data), to ensure inclusion of the diverse groups and

communities in the city, and to steer the deliberations towards broad consensus. You should be mindful of the language employed and the fact that one system of engagement might be needed to support another, thus highlighting the significance of a comprehensive engagement strategy.

Illustrative examples of various citizen engagement methods are given below:

- Face-to-face consultations: Town Meetings, ward-level consultations, focus-group discussions (FGDs)
- Written submissions: Invite and receive suggestions in writing (eg. manuscript) from those who may not be able to participate in either the face-to-face consultations or the online or mobile engagements.
- Local Print, Radio & TV: The media can be a useful ally in the effort to establish clear vision and consensus.
- Online crowd-sourcing and polling: You can conduct a survey of citizens to gather their ideas about the solutions that are needed in your city and to seek their suggestions or establish priorities. This can be done using online platforms such as the 'MyGov' portal.
- Mobile Polling: Define key questions that can be easily understood by most citizens and ask them to poll the options. This method can be very effective in defining priorities between a set of options (eg. deliberative polling). For slum areas, create a Wi-Fi hot spot and use an App to increase participation of the usually excluded residents. Such innovative methods of citizen inclusion will be preferred.
- Pictorial representations: Pictorial representations and other mediated methods should be used to include residents who are unable to read and write.

Kindly answer the following questions to capture the range, substance and outcomes of your citizen engagement strategy:

6. What were the different citizen engagement methods used in your city during each of the three rounds of engagements? For each method, give details of how many citizens were involved and what kind of individuals/groups/communities were involved. Give number of residents who participated from records of MyGov, usage of Wi-Fi hot spots, SMS's received, manuscripts, crowd-sourcing responses, etc. {Describe in max. 100 words each}
    a. Round 1: Method/s, extent, inclusion

b. Round 2: Method/s, extent, inclusion
c. Round 3: Method/s, extent, inclusion

7. Describe in tabular form, the Indian and global models and best practices for Smart Solutions placed before citizens and the reaction of the citizens on their applicability and use after local adoption/adaptation {Describe in max. 250 words}
8. What are the key insights/suggestions/feedback that emerged from each round of engagement? (Summarize in max. 200 words each)
    a. Round 1: Issues/Needs, Priorities and citizen-generated solutions identified in Column 'K' on self-assessment sheet
    b. Round 2: Feedback/suggestions (including the voices of the marginalized) on the benefits and costs of Pan-city solution/s and Area-based development/s
    c. Round 3: Feedback and suggestions on the draft proposal, especially the implementation and financing plans.
9. After the citizen engagement, fill out the second part (Column J) of the City-level self-Assessment worksheet outlining the aspirations of your city based on the feedback obtained from citizens in Round 1. In Column 'K', mention the single most significant initiative or input that will help your city to achieve the 'Advanced' level that is described in Column 'G'. {Max. 50 words per cell}
10. Which suggestions or solutions provided by citizens during the engagement process were finally incorporated into your smart city proposal? How were contrary voices that disagreed with your ideas accommodated in the strategy and planning? {Describe in max. 250 words}

D. VISION & SUB-GOALS

The goals of the Smart Cities Mission (Mission Transform-nation) are to promote cities that provide core infrastructure, give a decent quality of life and a clean and sustainable environment to their citizens and apply smart solutions to improve services and infrastructure. During Round 1 of the citizen engagement process, the attempt must be to engage the citizens with the task of collectively constructing a vision and sub-goals for the city that are contained within the overarching National goals.

A strategic vision shapes a preferred future for a city; it provides direction for the activities of the municipality, citizens and stakeholders; and ensures that citizens, city agencies, and stakeholders are working toward those shared sub-goals. The city vision captures what your

city can be in the future, with the complete transformation being generally achieved within a ten to twenty year time-frame. The vision statement should inspire your city's residents and can even become the branding for your smart city.

VISION

11. What is the overarching Vision Statement that emerges from the consultations? {Describe in max. 100 words}
12. How does the Vision relate specifically to the city's profile and the City-level Self Assessment completed during Round 1 of citizen engagement? {Describe in max. 250 words}
13. How does the Vision include your city's economic, social, environmental and spatial components? {Describe in max. 250 words}
14. How does the Vision Statement summarize the impact on key aspects- main economic activity, sustainability and inclusiveness? {Describe in max. 250 words}

SUB-GOALS

The Self-Assessment Form (Annexure 2) prepared after citizen consultation is a useful tool for defining the sub-goals of the City (contained within National Goals). The sub-goals provide the purpose for pan-city and area-based development of the smart city. The goals refer to the national level goals of the Smart Cities Mission as outlined in the guidelines. The sub-goals are the broader aims for your city that you need to define based on citizen engagement and an understanding of your city's context. And the purpose refers to the specific aims of your pan-city and area-based development projects. These should be identified through your face-to-face consultations, or through any or all of the engagement methods used by your city – for example, the citizen priorities articulated in Round 1 of the citizen consultation (captured in Self Assessment sheet, Column 'K') become directives for the sub-goals. This process should be repeated for identifying purposes for each of the area-based developments (especially retrofitting and redevelopment, which are within the existing built-up area) and application of city-wide Smart Solutions.

15. Link the vision statement to sub-goals of the city and the sub-goals, in turn, to the National goals. {On a single A-4 sheet, provide a flow chart and description of vision, sub-goals and national goals}
16. Describe what impacts you will seek to achieve on the basis of the sub-goals that you have identified. {Describe in max. 250 words}

E. STRATEGIC PLAN

Central to the Mission are the concepts of area-based developments and pan-city solutions. The strategic plan is a plan for delivering core (basic) infrastructure to the entire city over time and consists of Pan-city solution/s and one or more area-based developments. It is important that the city should conceive of a strategic plan that projects an achievable and practical set of interlinked inputs and initiatives that can contribute to achieving the expected outcomes. The Strategic Plan will comprise of responses to the following key questions:

17. In Table 3, list the Missions/Programmes/Schemes of the Government of India (eg. AMRUT, HRIDAY, Shelter for All, Digital India, Make in India and Skill India) and other external projects that can help to achieve the city sub-goals identified in Question 15 (using Annexure 2 as reference) and describe the kinds of inputs/resources and arrangements required to achieve the convergence. {Max. 50 words per cell}

TABLE 3		
Sub-Goals	**Missions/Programmes/Schemes/Projects**	**How to achieve convergence**

18. Describe how the convergence of Missions/Programmes/Schemes/external projects in the pan-city and area-based proposals will maximize their respective impacts. {Max. 350 words}

The next step would be to identify/select the sites for the area-based developments. The criteria for selecting the sites can be highly diverse and complex and require using tools, such as willingness for Tax Increment Financing, polling, local political economy/presence of the poor and vulnerable, data analysis, situations analysis, etc.

19. What could be the pan-city project/solution and the exemplary area-based projects – redevelopment, retrofitting, Greenfield – that can assist the city to achieve the stated sub-goals? {Max. 350 words}

20. What is the approach and methodology followed by you in selecting/identifying the nature and extent of the pan-city proposal and the locations of the area-based developments? Describe the basis – the city profile, citizen opinion, the opinion of the elected representatives – for your choice of sites. {Max. 500 words}
21. Why is the approach chosen (retrofitting/ redevelopment/ greenfield or a combination) the most appropriate for the area(s) and for achieving the sub-goals of your city? {Max. 300 words}
22. A summary of the strategic plan should be given in Table 4 below. With reference to the performance indicators in the table, set your targets. How far do these targets lead to the achievement of the sub-goals of the City? (Max. 50 words per cell).

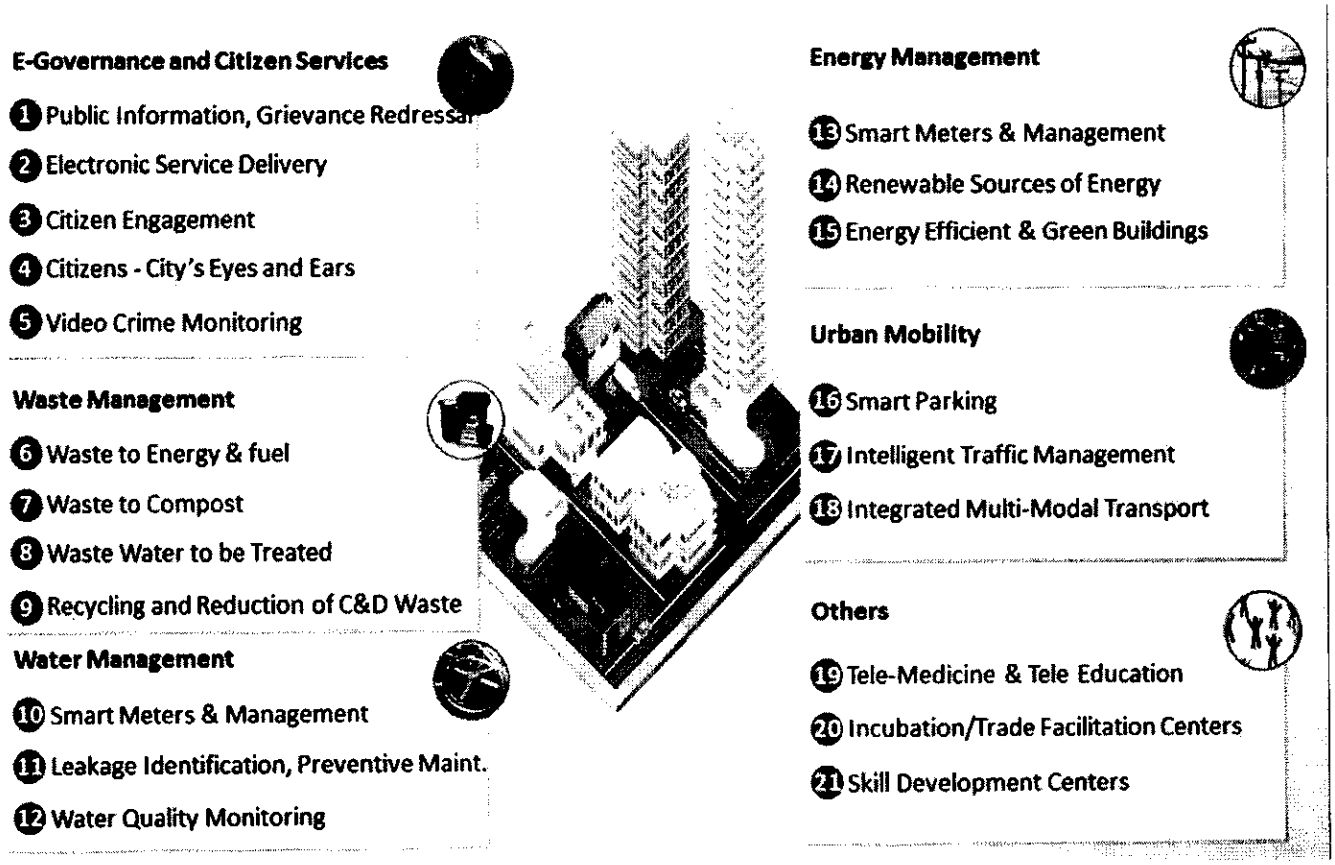
TABLE 4

City-Level Sub-Goals and Project Purpose	Performance Indicators	How it contributes to the achievement of National goals and sub-goals
Sub-goal of City:		
Purpose of Area based developments:		
1		
2		
Purpose of each Area based activity		
1.1		
1.2		
2.1		
2.2		
Purpose of Pan-city Smart Solutions:		
1		
2		
Purpose of each Pan-city Smart Solution activity:		
1.1		
1.2		
2.1		

F. PAN-CITY PROPOSAL

A pan-city solution should benefit the entire city. It could focus on any sub-goal of your city and could improve aspects of the city's governance or infrastructure or public services for all citizens. Its impact should be felt across the city in a relatively short time-frame. Frugal innovations are encouraged, especially when they contribute to long-term sustainability and creation of livelihoods. Some of the salient features and solutions that may be applied as Pan-

City solutions are shown in the illustration given below. Note that the list of solutions indicated in the illustration is not exhaustive, and other solutions can be added as appropriate.



Please answer the following questions about your pan-city proposal:

23. Describe your idea for a pan-city proposal, mentioning the specific aims that the proposal seeks to address, the underlying factors that contribute to the problem that the proposal tries to address, and how the proposal addresses these underlying factors. Use data wherever it is available. {Max. 500 words}
24. How socially inclusive is your pan-city proposal? What makes it so? {Max. 150 words}
25. Has your city or any other city in the country previously attempted to apply the proposed smart solution to the identified gap? If so, when and what were the outcomes? {Max. 150 words}
26. Are you adopting or adapting a model or 'best practice' that has worked in another city? {If yes, describe in max. 150 words}
27. What are the key components of your pan-city proposal (eg. key components for a bus transport pan-city proposal could include mapping bus routes, a live information system for bus timings, design of bus stands, etc.)? {Max. 250 words}

28. In Table 5 below, please describe a plan for your pan-city proposal through the inputs (monetary, physical and human resources) that will be required, the activities that you will conduct, the outputs (immediate effects), outcomes (medium-term results), and impact (long-term results) of these activities. {Max. 50 words per cell}

Table 5				
Input	**Activity**	**Output**	**Outcome**	**Impact**

29. What is the purpose of your pan-city proposal? How does this plan help achieve that purpose? And how does the purpose of your pan-city proposal relate to the sub-goals for the city? What are the assumptions that you are making in thinking that it will help achieve the sub-goals? (Max. 200 words)
30. Based on these assumptions, describe the three most significant factors for ensuring the success of the pan-city proposal and the mitigation strategy. {Max. 3 x 100 words each}
31. With reference to Table 5, tell us the following (Max. 100 words for each bullet):
    - Impact – What changes will the Proposal bring about?
    - Sustainability – How are the benefits likely to be maintained for an extended period?
    - Relevance – How are the sub-goals consistent with citizen needs and priorities?
    - Effectiveness – How will the Mission objectives be achieved? Will the outputs lead to any unintended outcomes?
    - Efficiency – How will timely and adequate availability of inputs/resources be ensured?

G. AREA-BASED PROPOSAL

An area-based proposal will identify an area of the city that has been selected through desk research, analysis and citizen engagement as the appropriate site for either of three types of development: retrofitting (approx. 500 acres), redevelopment (approx. 50 acres) or Greenfield development (approx. 250 acres). This area will be developed into a 'smart' area, which incorporates all the Essential Elements prescribed in the Mission Guidelines and any additional features that are deemed to be necessary and appropriate.

Please answer the following questions about the proposed area-based development:

32. Summarize your idea for an area-based development. {Max. 500 words}
33. What do the residents of your city consider the most important aspects of the Smart City features described in Annexure 2 to be achieved in the selected area? How did you intend to achieve these? (Max 200 words)
34. How does your idea for the area-based proposal relate back to the sub-goals for your city? {Max. 150 words}
35. How socially inclusive is your area-based proposal? What makes it so? {Max. 150 words}
36. Describe, using mainly graphic means (maps, diagrams, pictures, etc.) the proposed area-based development, including the project boundaries, connectivity, significant relationships, etc. {Max. 2 nos. of A-3 size sheets}
37. What are the key components of your area-based development proposal (eg. buildings, landscaping, on-site infrastructure, water recycling, dual piping for water supply, etc.)? {Describe in max. 250 words}
38. Describe the 'smart' characteristics of the proposed development that relate to urban form (e.g. uncluttered public places, mixed-use, open spaces, walkability) and how these will be incorporated.
39. In Table 6, please describe a plan for your area-based proposal through the inputs (monetary, physical and human resources) that will be required, the activities that you will conduct, the outputs (immediate effects), outcomes (medium-term results), and impact (long-term results) of these activities.

Table 6

Input	Activity	Output	Outcome	Impact

40. What is the purpose of your area-based development proposal? How does this plan help achieve that purpose? And how does this purpose relate to the sub-goals for the city? What are the assumptions that you are making in thinking that it will help achieve the sub-goals? {Max. 200 words}

41. Based on these assumptions, describe the three most significant factors for ensuring the success of the area-based development proposal and the mitigation strategy. {Max. 3 x 100 words each}
42. Referring to Table 6, tell us the following {Max 100 words for each bullet}:
    - Impact - What changes will the Proposal bring about?
    - Sustainability - How are the benefits likely to be maintained for an extended period?
    - Relevance - How are the sub-goals consistent with citizen needs and priorities?
    - Effectiveness – How will the Mission objectives be achieved? Will the outputs lead to any unintended outcomes?
    - Efficiency – How will timely and adequate availability of inputs/resources be ensured?

H. IMPLEMENTATION FRAMEWORK

The implementation framework chosen by you will determine, to a significant extent, the chances of success of the city strategy and proposals.

The State Government has submitted an undertaking to make your city smart and has issued an order to constitute an Inter-departmental Task Force to coordinate efforts between all departments and agencies in your state/ULB. The CEO of the SPV is required to submit, every six months, a Score-Card and Status Update on the progress of work. Release of funds from the Mission Directorate will be contingent on progress in implementation. The formation of the SPV as per the Smart City Mission Guidelines is a crucial step in the implementation process.

43. Describe the critical milestones, realistic timelines and sequencing of efforts and events that you are projecting as the short and long term scenarios for your smart city? {Max. 250 words}
44. Describe the SPV you propose to create in your city, with details of its composition and structure, leadership and governance, and holding pattern. {Max. 500 words}
45. List out the government (Central, state/ULB) departments, parastatal organizations and public agencies who will be involved with the time-bound execution of each of the project components you have identified in Questions 27 and 37. Indicate the designation and

name of the officer assigned by each respective department/agency to the specific component that needs to be executed.

46. List all the private companies/corporations/organizations that need to be engaged with the Execution and Operations & Maintenance of the various projects envisaged in this SCP, along with their roles and responsibilities. Mention whether they will be involved as vendors, concessionaires, JV partners, etc. Describe the basic TORs for each relationship. {Max. 100 words for each entity}
47. Describe the institutional linkages and civil society partnerships that may be required for the implementation of the pan-city and area-based proposals. {Max. 150 words}
48. Describe the implementation framework in Table 7 below:

TABLE 7

Purpose and Activity	**Performance indicator**	**Baseline (as on _)**	**Mission target**	**For FY:** (do upto purpose achieved)			
				For Half Year 1		**For Half Year 2**	
				Progress to be made on baseline	Funds to be utilized	Progress to be made on baseline	Funds to be utilized
Purpose 1							
Activity 1							
Activity 2							
Purpose 2							
Activity 1							
Activity 2							
Etc.							

49. Give the monitoring plan in Table 8 below:

TABLE 8

Element	**Indicators (including targets)**	**Means of verification**				**Use of information**	
		Data source	**Frequency and cost of collection**	**Responsibility of collection**	**Collection method**	**Reporting**	**Presentation**
Sub-goal							
Purpose							
Outputs							
Activities							
Inputs							

I. FINANCING PLAN

The development of bankable proposals will be a key success factor in the Smart City Mission. In order to arrange appropriate amounts and types of funding and financing for your SCP, you must keep financial considerations always in mind while preparing your overall strategy and the pan-city and area-based proposals. It is anticipated that innovative means of funding and financing the projects will be necessary. For this purpose, you must evaluate the capacity of the ULB and the SPV to undertake self-funded development projects, the availability of funds from other government schemes that will converge in your SCP, and the finance that can be raised from the financial market.

Please answer the following questions:

50. What is the estimated budget for your pan-city proposal and how will it be financed? If you plan to seek loans or issue bonds, what revenue sources will be used to pay back the loans? {Max. 250 words}
51. What is your estimate budget for area-based development and how will it be financed? If you plan to take out loans and issue bonds, what revenue sources will be used to pay back loans? {Max. 250 words}
52. What is your plan for covering the Operations & Maintenance costs for each of the project components identified in Questions 26 and 34? {Max. 250 words}
53. What are your financial assumptions? Do you have any alternatives or fall-back plans if the financial assumptions do not hold? {Max. 250 words}

J. BENEFITS & IMPACTS

54. What will be the measurable impact of your **pan-city proposal**? Please keep in view the City-level Self Assessment and the information given in Table 4. Describe with respect to the five types below, as relevant to your city and proposals {Max. 50 words each}:
    a. Governance Impact (eg. government response time to citizen complaints halved)
    b. Spatial Impact (eg. built form changed to create more public space)

c. Economic Impact (eg. 10,000 new jobs created)
d. Social Impact (eg. better infrastructure provided for 1000 informal vendors)
e. Environmental Impact (eg. water quality improved by reducing pollutants by half)

55. How will you measure the success of your pan-city and area-based proposals and when will the public be able to 'see' or 'feel' benefits? {Max. 150 words}
    a. Immediately, within Year 1
    b. In 3-5 years
56. What will be the measurable impact of the area-based development proposal, both on the area and the wider city? Please keep in view the City-level Self Assessment and the information given in Table 5. Describe with respect to the five types below, as relevant to your city and proposals {Max. 50 words each}:
    a. Governance Impact (eg. government response time to citizen complaints halved)
    b. Spatial Impact (eg. built form changed to create more public space)
    c. Economic Impact (eg. 10,000 new jobs created)
    d. Social Impact (eg. better infrastructure provided for 1000 informal vendors)
    e. Environmental Impact (eg. water quality improved by reducing pollutants by half)

K. PROCESS AND TEAMWORK

It would be helpful to know about how you prepared the proposal and who was involved in this process.

57. Create an organogram that shows the relationships between all those who helped you create this proposal and the role they will play in the future, such as:
    - MPs, MLAs, MLCs.
    - Mayors, Councilors, other elected representatives.
    - Divisional Commissioner
    - Collector
    - Municipal Commissioner
    - Chief Executive of the Urban Development Authority/Parastatal
    - Consultant (Select from empanelled list)
    - Handholding Organisation (Select from following list: World Bank, ADB, JICA, USTDA, AFD, KfW, DFID, UN Habitat, UNIDO, Other)
    - Vendors, PPP Partners, Financiers

- Others, (eg. community representatives) as appropriate to your city

When creating the organogram, kindly keep in mind the responses you have given to Questions 41, 42 and 43.

ANNEXURE 1

Smart City Features

	Feature	Definition
1	Citizen participation	A smart city constantly shapes and changes course of its strategies incorporating views of its citizens to bring maximum benefit for all. (Guideline 3.1.6)
2	Identity and culture	A Smart City has a unique identity, which distinguishes it from all other cities, based on some key aspect: its location or climate; its leading industry, its cultural heritage, its local culture or cuisine, or other factors. This identity allows an easy answer to the question "Why in this city and not somewhere else?" A Smart City celebrates and promotes its unique identity and culture. (Guideline 3.1.7)
3	Economy and employment	A smart city has a robust and resilient economic base and growth strategy that creates large-scale employment and increases opportunities for the majority of its citizens. (Guideline 2.6 & 3.1.7 & 6.2)
4	Health	A Smart City provides access to healthcare for all its citizens. (Guideline 2.5.10)
5	Education	A Smart City offers schooling and educational opportunities for all children in the city (Guideline 2.5.10)
6	Mixed use	A Smart City has different kinds of land uses in the same places; such as offices, housing, and shops, clustered together. (Guidelines 3.1.2 and 3.1.2)
7	Compactness	A Smart City encourages development to be compact and dense, where buildings are ideally within a 10-minute walk of public transportation and are located close together to form concentrated neighborhoods and centers of activity around commerce and services. (Guidelines 2.3 and 5.2)
8	Open spaces	A Smart City has sufficient and usable public open spaces, many of which are green, that promote exercise and outdoor recreation for all age groups. Public open spaces of a range of sizes are dispersed throughout the City so all citizens can have access. (Guidelines 3.1.4 & 6.2)
9	Housing and inclusiveness	A Smart City has sufficient housing for all income groups and promotes integration among social groups. (Guidelines 3.1.2)
10	Transportation & Mobility	A Smart City does not require an automobile to get around; distances are short, buildings are accessible from the sidewalk, and transit options are plentiful and attractive to people of all income levels. (Guidelines 3.1.5 & 6.2)
11	Walkable	A Smart City's roads are designed equally for pedestrians, cyclists and vehicles; and road safety and sidewalks are paramount to street design. Traffic signals are sufficient and traffic rules are enforced. Shops, restaurants, building entrances and trees line the sidewalk to encourage walking and there is ample lighting so the pedestrian feels safe day and night. (Guidelines 3.1.3 & 6.2)
12	IT connectivity	A Smart City has a robust internet network allowing high-speed connections to all offices and dwellings as desired. (Guideline 6.2)
13	Intelligent government services	A Smart City enables easy interaction (including through online and telephone services) with its citizens, eliminating delays and frustrations in interactions with government. (Guidelines 2.4.7 & 3.1.6 & 5.1.4 & 6.2)
14	Energy supply	A Smart City has reliable, 24/7 electricity supply with no delays in requested hookups. (Guideline 2.4)

	Feature	Definition
15	Energy source	A Smart City has at least 10% of its electricity generated by renewables. (Guideline 6.2)
16	Water supply	A Smart City has a reliable, 24/7 supply of water that meets national and global health standards. (Guidelines 2.4 & 6.2)
17	Waste water management	A Smart City has advanced water management programs, including smart meters, rain water harvesting, and green infrastructure to manage storm water runoff. (Guideline 6.2)
18	Water quality	A Smart City treats all of its sewage to prevent the polluting of water bodies and aquifers. (Guideline 2.4)
19	Air quality	A Smart City has air quality that always meets international safety standards. (Guideline 2.4.8)
20	Energy efficiency	A Smart City promotes state-of-the-art energy efficiency practices in buildings, street lights, and transit systems. (Guideline 6.2)
21	Underground electric wiring	A Smart City has an underground electric wiring system to reduce blackouts due to storms and eliminate unsightliness. (Guideline 6.2)
22	Sanitation	A Smart City has no open defecation, and a full supply of toilets based on the population. (Guidelines 2.4.3 & 6.2)
23	Waste management	A Smart City has a waste management system that removes household and commercial garbage, and disposes of it in an environmentally and economically sound manner. (Guidelines 2.4.3 & 6.2)
24	Safety	A Smart City has high levels of public safety, especially focused on women, children and the elderly; men and women of all ages feel safe on the streets at all hours. (Guideline 6.2)

ANNEXURE 2

Self-Assessment Form

A	B	C	D	E	F	G	H	I	J	K
	Feature	Definition	Scenario 1 (BASE)	Scenario 2	Scenario 3	Scenario 4 (ADVANCED)	Self-assessment of the city (for Pan-City Solution) or area (for Area-based development), with regard to each feature	Basis for assessment and/or quantitative indicator (Optional - only if data exists)	Projection of "where the city wants to be" with regard to the feature/indicator	Input/Initiative that would move the city/area from its current status to Advanced status (Scenario 4)
1	Citizen participation	A smart city constantly shapes and changes course of its strategies incorporating views of its citizen to bring maximum benefit for all. (Guideline 3.1.6)	The City begins identifies priorities and projects to pursue without consulting citizens.	City undertakes citizen participation with some select stakeholders. The findings are compiled and incorporated in some projects or programs. Very few major decisions are shared with .citizens until final projects are unveiled.	City conducts citizen engagement at city level and local area level with most stakeholders and in most areas. The findings are compiled and incorporated in projects or programs.	City constantly conducts citizen engagement with people at each Ward level to incorporate their views, and these shape priorities and development projects in the city. Multiple means of communication and getting feedback such, both face-to-face and online are utilised. The effectiveness of city governance and service delivery is constantly enhanced on the basis of feedback from citizens.				
2	Identity and culture	A Smart City has a unique identity, which distinguishes it from all other cities, based on some key aspect: its location or climate; its leading industry, its cultural heritage, its local culture or cuisine, or other factors. This identity allows an easy answer to the question "why in this city and not somewhere else?" A Smart City celebrates and promotes its unique identity and culture. (Guideline	There are few architectural monuments, symbols, and festivals that emphasise the unique character of the city. Built, natural and cultural heritage is not preserved and utilised or enhanced through physical, management and policy structures.	Historic and cultural resources are preserved and utilised to some extent but limited resources exist to manage and maintain the immediate surroundings of the heritage monuments. New buildinds and areas are created without much thought to how they reflect the identity and culture of hte city.	Historic and cultural heritage resources are preserved and utilised and their surroundings are well-maintained. Public spaces, public buildings and amenities reflect the cultural identity of the city,.	Built, natural and intangible heritage are preserved and utilised as anchors of the city. Historical and cultural resources are enahnced through various mediums of expression. Public spaces, open spaces, amenities and public buildings reflect local identity and are widely used by the public through festivals, events and activities.				
3	Economy and employment	A smart city has a robust and resilient economic base and growth strategy that creates large-scale employment and increases opportunities for the majority of its citizens. (Guideline 2.6 & 3.1.7 & 6.2)	There are some job opportunities in the city but they do not reach all sections of the population. There are a high number of jobs in the informal sector without sufficient facilities.	There is a range of job opportunities in the city for many sections of the population. The city attempts to integrate informal economic activities with formal parts of the city and its economy.	There are adequate job opportunities for all sections of society. But skill availability among residents can sometimes be a challenge.	There are adequate opportunities for jobs for all sections of income groups and skill levels. Job-oriented skill training supported by the city and by industry. Economic activities are suited to and build on locational and other advantages of the city.				
4	Education	A Smart City offers schooling and educational opportunities for all children in the city (Guideline 2.5.10)	The city provides very limited educational facilities for its residents. There are some schools but very limited compared to the demand. Many schools are in poor condition.	City provides adequate primary education facilities within easily reachable distance of 15 minutes walking for most residential areas of the city. The city also provides some secondary education facilities.	City provides adequate primary and secondary education facilities within easily reachable distance for most residential areas of the city. Education facilities are regularly assessed through - databases of schools including number of students, attendance, teacher - student ratio, facilities available and other factors.	City provides adequate and high-quality education facilities within easily reachable distance of 10 minutes walking for all the residential areas of the city and provides multiple options of connecting with specialised teaching and multi media enabled education. Education facilities are regularly assessed through database of schools including number of students, attendance, teacher-student ratio, facilities available and other factors.				
5	Health	A Smart City provides access to healthcare for all its citizens. (Guideline 2.5.10)	Healthcare is difficult for citizens to access - demand for healthcare often exceeds hospitals' ability to meet citizen needs.	The city provides some access to healthcare for its residents but healthcare facilities are overburdened and far from many residents. Access to preventive health care is only easily available for some residents.	City provides adequate health facilities within easily reachable distance for all the residential areas and job centers of the city. It has an emergency response system that connects with ambulance services.	City provides adequate health facilities at easily accessible distance and individual health monitoring systems for elderly and vulnerable citizens which are directly connected to hospitals to prevent emergency health risks and to acquire specialised health advice with maximum convenience. The city is able to foresee likely potential diseases and develop response systems and preventive care.				
6	Mixed use	A Smart City has different kinds of land uses in the same places; such as offices, housing, and shops, clustered together. (Guidelines 3.1.2 and 3.1.2)	The city has mostly separated uses and areas are focused either on residential, commercial, or industrial, with little co-existance of uses. The average resident cannot walk to the closest market or shops near his or her home. For almost everyone, going to work o· going shopping for basic needs requires a journey by automobile or bus of more than 15 minutes. Land use regulations prevent putting commercial or office locations in residential neighborhoods and vice versa.	In some parts of the city , there is a mixture of land uses that would allow someone to live, work, and shop in close proximity. However, in most areas, there are only small retail stores with basic supplies near housing. Most residents must drive or use public transportation to access a shop for food and basic daily needs. Land use rules support segretating housing, retail, and office uses, but exceptions are made when requested.	Most parts of the city have housing, retail, and office buildings in close proximity. Some neighborhoods have light industrial uses within them (e.g., auto repair, craft production). Land use rules allow for mixed uses.	Every part of the city has a mix of uses. Everyone lives within a 15-minute trip of office buildings, markets and shops, and even some industrial uses. Land use rules require or encourage developers to incorporate a mixture of uses in their projects.				
7	Compact	A Smart City encourages development to be compact and dense, where buildings are located close to one another and are ideally within a 10-minute walk of public transportation, forming concentrated neighborhoods. (Guidelines 2.3 and 5.2)	The city is expanding rapidly at its periphery into undeveloped land, rural or natural areas, or along industrial corridors - both formally and informally. Formal new development is occuring in a way that is "sprawling," meaning that the buildings spread across a wide area and are far from one another. Residents or tenants find it easier or safer to travel by automobile because it takes a long time to walk between destinations and there are busy roads separating buildings. Large pockets of land in the inner-city are vacant. New developments at the periphery tend to be large-scale residential developments, often enclosed with a gate and oriented to the automobile.	The city has one or two high density areas - such as the city center, or historic areas, where buildings are concentrated together and where people can walk easily from building to building and feel as though they are in center of activity. Most of the city consists of areas where buildings are spread out and difficult to walk between, sometimes with low-density per hectare. Regulations tend to favor buildings that are separated from one another, with lots of parking at the base and set-back from the streets. The city likely has some pockets of under-utilized land in the center. New formal developments at the periphery tend to be large-scale residential developments, often enclosed with a gate and oriented to the automobile.	The city has multiple high density clusters that are easy to walk around where buildings are close together. However, the city actively encourages development to occur on under-utilized parcels of land into high-density, walkable areas. When new formal large-scale development projects happen at the periphery, they are encouraged to be dense and compact, with buildings that are close together and line the streets. The city actively encourages or incentivizes re-development of under-utilized parcels in the inner-city, especially those located close to public transportation.	The city is highly compact and dense, making the most of land within the city. Buildings are clustered together, forming walkable and inviting activity centers and neighborhoods. Regulations encourage or incentivize re-development of under-utilized land parcels in the city center. Buildings are oriented to the street and parking is kept to a minimum, located below ground or at the back of buildings. Public transport and walking connects residences to most jobs and amenities. Residential density is at an optimal with affordable housing available in most areas.				
8	Public open spaces	A Smart City has sufficient and usable public open spaces, many of which are green, that promote exercise and outdoor recreation for all age groups. Public open spaces of a range of sizes are dispersed throughout the City so all citizens can have access. (Guidelines 3.1.4 & 6.2)	The city has very few usable public open spaces and very few usable green spaces. Available recreational spaces are located far away and are dispersed at long distances around the city. The few available public open spaces offer a limited variety of experiences for all sections of population and age groups such as places for sport, places for rest, and places for play.	A variety of public open spaces are available in some neighborhoods, but are not available in all the areas of the city or are located far away from residential areas .Many of the open spaces have access restrictions, or are not well-maintained. A variety of types of public open spaces may be lacking, such as natural areas, green areas, parks, plazas, or recreation areas.	Most areas of the city have some sort of public open space. There is some variety in the types of public spaces in the city. However, public spaces are sometimes not within easy reach or access of more vulnerable populations and are more restricted in poorer neighbourhoods.	Public open spaces are well dispersed throughout the city. Every residential area and work space has access to open space within 10 minutes walking distance. Open spaces are of various types - natural, green, plazas, parks, or recreation areas - which serve various sections of people. Public spaces tend to truly reflect the natural and cultural identity of the city.				

9	Housing and inclusiveness	A Smart City has sufficient housing for all income groups and promotes integration among social groups. (Guidelines 3.1.2)	Housing is very limited and highly segregated across income levels. Population growth far exceeds the creation of new housing. The poor live in informal settlements with limited to no access to basic services, and are concentrated in a few areas. The wealthy live in separate enclaves. Those in the middle have few , if any options.	Housing is available at most income levels but is highly segregated across income levels. Population growth slightly exceeds the creation of new housing. The wealthy and the middle class have housing that meets their needs at costs appropriate to their income. The poor live in informal settlements.	Housing is available at all income levels, but is highly segregated across income levels. The growth of supply of housing almost meets the rate of population growth. Increasingly, lower and middle-income people can find housing in areas that are conveniently located.	A wide range of a housing is available at all cost levels. The supply of housing is growing at pace with population. Affordable, moderate, and luxury housing are found clustered together in many areas of the city				
10	Transport	A Smart City does not require an automobile to get around; distances are short, buildings are accessible from the sidewalk, and transit options are plentiful and attractive to people of all income levels. (Guidelines 3.1.5 & 6.2)	Personal automobile centric city with very few modal options. Long trip lengths for daily commute to work and education. Accessing various areas by walking or cycling is difficult. Women and vulnerable sections find it very difficult to move independently in the city. There is limited public transport. Vehicles cause high air and noise pollution levels in the city. Vehicles dominate public spaces and affect their effective functioning.	The street network system is elaborate but public transport choices are restricted. Public transport can be too expensive or unaffordable for the poor. Pedestrian infrastructure is only available in select areas. The majority of investments focus on reducing traffic congestion through the creation of more roads.	Network of streets are fairly complete. Public transport covers most areas of the city. However last mile connectivity remains incomplete and affects transport options. Foot paths are accessible in most areas, whereas concerns of safe crossings and security throughout the day remain. Parking zones are demarcated but absence of pricing increases over utilization of parking lots.	Street network is complete and follows a clear structure. Public transportation network covers the entire city and intensity of connection relates with the demand. Plenty of options of public transport are available and affordable for all sections of the society. There is multi-modal integration at all mass transit stations and organized-priced on street and off street parking. Walking and cycling is prevalent.				
11	Walkable	A Smart City's roads are designed equally for pedestrians, cyclists and vehicles; and road safety and sidewalks are paramount to street design. Traffic signals are sufficient and traffic rules are enforced. Shops, restaurants, building entrances and trees line the sidewalk to encourage walking and there is ample lighting so the pedestrian feels safe day and night. (Guidelines 3.1.3 & 6.2)	The city is designed mainly for the automobile. Daily life without a car requires long bus rides. Walking is difficult and often dangerous; there are few pavements, existing pavements need repair and lack trees to provide shade for pedestrians, and marked pedestrian crossings are rare. New buildings have their main entrances set-back from the street, sometimes with large driveways or parking lots separating them from the street, and sometimes are are enclosed by gates. Traffic signals are often disobeyed	Older areas of the city see a mix of pedestrians, cyclists, and vehicles but newer areas are focused mainly on the automobile. In the new areas, there are few pavements and main entrances to new buildings are not accessible from the front of the street. large driveways or parking lots often separating them from the street, and sometimes are are enclosed by gates. In these areas, traffic signals are disobeyed.	The city has a good network of pavements and bike lanes. Buildings in most areas of the city are easily accessible from the pavement. However, traffic signals are sometimes disobeyed and it can feel difficult to cross the street.	The city is highly walkable. Pavements exist on every street and are maintained. Trees line many sidewalks to provide shade for pedestrians. Buildings in most areas of the city are easily accessible from the sidewalk. Traffic signals control the flow of automobiles and are enforced. A network of bike lanes exists to promote cycling as a means of transport. Traffic rules are followed and enforced with great seriousness.				
12	IT connectivity	A Smart City has a robust internet network allowing high-speed connections to all offices and dwellings as desired. (Guideline 6.2)	City has no major plans to bring increased high speed internet connectivity to the public.	The city has made plans to provide high speed internet connectivity through the existing framework.	The city makes has high speed internet connectivity available in most parts of the city.	The city offers free wifi services to provide opportunity for all the citizens to connect with high speed internet across the city.				
13	ICT-enabled government services	A Smart City enables easy interaction (including through online and telephone services) with its citizens, eliminating delays and frustrations in interactions with government. (Guidelines 2.4.7 & 3.1.8 & 5.1.4 & 6.1)	Essential Government services are not linked with online platforms. Paper intensive interactions with the local Government continues. Recieving services and response to citizen complaints take a long time. There is limited availability of data to monitor service delivery.	Some of the public services are provided online and infrastructure for total digitalization is not in place. Service delays occur regularly in some sectors. Responses to citizen inquiries or complaints are often delayed. No integration between services and billing.	Most of the services are provided on line and offline. Data transparency helps monitoring. Systems and processes to better coordinate between various Government agencies are being developed.	All major services are provided through online and offline platforms. Citizens and officials can access information on accounting and monitor status of projects and programs through data available on online system. Robust data infratsructure system shares information and enhances internal governmental coordination.				
14	Energy supply	A Smart City has reliable, 24/7 electricity supply with no delays in requested hookups. (Guideline 2.4)	There is only intermittent electricity supply with regular power shedding. Many residents have to plan their days around when power is available.	Electricity supply and loads are managed as per demand and priority for various functions with clear scheduling, with electricity being available in many areas for most hours of the day.	Electricity a available in most parts of the city for most hours of the day but some areas are not so well-served. Smart metering exists in some parts of the city but not all.	Electricity is available 24 x 7 in all parts of the city with smart metering linked to online platforms for monitor ng and transparency.				
15	Energy source	A Smart City has at least 10% of its electricity generated by renewables. (Guideline 6.2)	The city does not have any renewable sources of energy and there is no commitment to promote this for the forseeable future.	The city is preparing plans for ensuring that it gets more energy from renewable sources and is in the process of making commitments in this regard.	Some energy consumed is the city is produced through renewable sources. There are long term targets for higher renewable energy capacities and the city is making plans to achieve these.	At least 10% of the energy used in the city is generated through renewable sources. The city is undertaking long-term strategic projects to tap renewable sources of energy in its region/beyond to increase the percentage of renewable energy sources.				
16	Water supply	A Smart City has a reliable, 24/7 supply of water that meets national and global health standards. (Guidelines 2.4 & 6.2)	The city has a poor water supply system with limited water availability. There are no clear targets to achieve higher quality and optimal quantity standards. Unaccounted water loss is above 40%	The city has intermittent water supply and availability. However it is setting targets and processes in place to try to improve its water supply. Unaccounted water loss is less than 30%.	The city has 24 x 7 water supply in most areas but the quality of water does not meet international health standards. Unaccounted water loss is less than 20%.	The city has 24 x 7 treated water supply which follows national and global standards and also available in suffecient quantity and affordable across all sections of the society. Unaccounted loss less than 15%.				
17	Water management	A Smart City has advanced water management programs, including smart meters, rain water harvesting, and green infrastructure to manage stormwater runoff. (Guideline 6.2)	The city does not measure all its supply. It does not recycle waste water to meet its requirements and rain water harvesting is not prevalent. Flooding often occurs due to storm water run-off.	The city has meters for all its water supply but lacks mechanisms to monitor. Water wasteage is very high. Some, but not much, rainwater harvesting exists.	The has meters for all its water supply with some smart mechanisms to monitor. Rainwater harvesting systems are installed and storm water is collected and stored in water bodies. However, recycling of waste water and reusage of storm water is limited.	The city has meters for all its water supply. It includes smart mechanisms to monitor remotely. Rainwater harvesting systems are installed and utilised through the city and storm water is collected and stored in water bodies and treated for usage. Recycled waste water is supplied for secondary uses.				
18	Waste water management	A Smart City treats all of its sewage to prevent the polluting of water bodies and aquifers. (Guideline 2.4)	The city is unable to treat all its sewage. Many local sewer lines open on to water bodies and open ground and pollute the environment.	Most waste water is collected and treated before before disposal. However the treated water does not meet standards and is not recycled for secondary uses.	All the waste water is collected and treated before before disposal. It is also treated to a high standard and some is recycled.	The city has zero waste water because all the waste water is collected, treated and recycled. It meets standards an reduces the need for fresh water.				
19	Air quality	A Smart City has air quality that always meets international safety standards. (Guideline 2.4.8)	City does not have plans, policies or programs to improve the air quality. Systems to monitor air quality are absent.	City has programs and projects to monitor air quality and spatialising the data to ascertain reasons for degrees of pollution in the air. A few strategies to decrease air pollution have been implemented.	City has programs and projects to monitor air quality and spatialising the data to ascertain reasons for degrees of pollution in the air. Pollution levels are acceptable.	The city has clean air by international standards. Live Air quality monitoring cover the entire city and data of air quality are mapped.				
20	Energy efficiency	A Smart City government uses state-of-the-art energy efficiency practices in buildings, street lights, and transit systems. (Guideline 6.2)	City has no programs or controls or incentive mechanisms to promote or support energy effeciency in buildings	The city promotes energy efficiency and some new buildings install energy effeciency systems that track and monitor energy use and savings.	Most new public buildings install energy effeciency systems and some older buildings are also retrofitted to be more energy efficient. Local government conducts counselling and outreach with developer, businesses and residents to adopt energy effeciency strategies	All the existing old and new public buildings employ energy effeciency principles in development and operation and apply for energy rating by national and international forums. Many non-public buildings are also energy efficient because the government promotes energy efficiency through incentives and regulations.				
21	Underground electric wiring	A Smart City has an underground electric wiring system to reduce blackouts due to storms and eliminate unsightliness. (Guideline 6.2)	City does not have plans for underground electric wiring system	More than 40% of the city has underground electric wiring system.	More than 75% of the city has underground electric wiring system.	More than 90% of the city has underground electric wiring system.				
22	Sanitation	A Smart City has no open defecation, and a full supply of toilets based on the population. (Guidelines 2.4.5 & 6.2)	Many parts of the city do not have access to sanitation infrastructure and facilities.	Sanitation facilities are available to 70% of the city's population.	Sanitation facilities are available to 90% of the city's population.	Sanitation facilities are available to 100% of the city's population.				

23	Waste management	A Smart City has a waste management system that removes household and commercial garbage, and disposes of it in an environmentally and economically sound manner. (Guidelines 2.4.3 & 6.2)	Waste collection systems do not pick up waste on a frequent basis and waste often enters into water bodies.	Waste generated is usually collected but not segregated. Recycling is attempted by difficult to implement.	Waste is segregated, collected, recycled and disposed in an environmentally sound manner.	The city reduces land fill caused by waste so that it is minimal. All the solid waste generated is seggregated at source and sent for recycling. Organic waste is sent for composting to be used for gardening in the city. Energy creation through waste is considered.				
24	Safety and security	A Smart City has high levels of public safety, especially focused on women, children and the elderly; men and women of all ages feel safe on the streets at all hours. (Guideline 6.2)	The city has low levels of public safety - most groups of residents feel insecure during most parts of the day in many parts of the city.	The city has medium levels of public safety - some more vulnerable groups feel insecure during some points of the day and in some parts of the city	The city has high levels of public safety - all citizens including women, children and the elderly feel secure in most parts of the city during most time in the day.	The city has very high levels of public safety - all residents feel safe in all parts of the city during all hours of the day.				

	Level of Development of city overall	Level of Development of city overall	(OPTIONAL) Any additional information, inlcuding any quantitative information
Citizen participation		#N/A	
Identity and culture		#N/A	
Economy and employment		#N/A	

	Level of Development of city overall	Level of Development of city overall	(OPTIONAL) Any additional information, inlcuding any quantitative information
Education		#N/A	
Health		#N/A	
Mixed use		#N/A	

	Level of Development of city overall	Level of Development of city overall	(OPTIONAL) Any additional information, inlcuding any quantitative information
Compact		#N/A	
Public open spaces		#N/A	
Housing and inclusiveness		#N/A	

	Level of Development of city overall	Level of Development of city overall	(OPTIONAL) Any additional information, inlcuding any quantitative information
Transport		#N/A	
Walkable		#N/A	
IT connectivity		#N/A	

	Level of Development of city overall	Level of Development of city overall	(OPTIONAL) Any additional information, inlcuding any quantitative information
Intelligent government services		#N/A	
Energy supply		#N/A	
Energy source		#N/A	

	Level of Development of city overall	Level of Development of city overall	(OPTIONAL) Any additional information, inlcuding any quantitative information
Water supply		#N/A	
Water management		#N/A	
Waste water management		#N/A	

	Level of Development of city overall	Level of Development of city overall	(OPTIONAL) Any additional information, inlcuding any quantitative information
Air quality		#N/A	
Energy efficiency		#N/A	
Underground electric wiring		#N/A	

	Level of Development of city overall	Level of Development of city overall	(OPTIONAL) Any additional information, inlcuding any quantitative information
Sanitation		#N/A	
Waste management		#N/A	
Safety and security		#N/A	