**INDIA SMART CITY MISSION** 

MISSION TRANSFORM-NATION



## THE SMART CITY CHALLENGE STAGE 2

#### SMART CITY PROPOSAL

SMART CITY CODE:

CONTENTS	QUESTION NO.	PAGE NO.
A. CITY PROFILE	1-8	7-22
B. AREA-BASED PROPOSAL	9-18	23-44
C. PAN-CITY PROPOSAL(S)	19-30	45-61
D. IMPLEMENTATION PLAN	31-36	62-76
E. FINANCIAL PLAN	37-43	77-86
ANNEXURES (1-4)		



Ministry of Urban Development Government of India

## **CHECKLIST**

All fields in the SCP format document have to be filled. The chart below will assist you in verifying that all questions have been answered and all fields have been filled.

Q. No	тіск					
PART A	: CITY F	ROFILE				
1.		QUALITY OF LIFE				
2.		ADMINISTRATIVE EFFICIENCY	ADMINISTRATIVE EFFICIENCY			
3.		SWOT				
4.		STRATEGIC FOCUS AND BLUEPRINT				
5.		CITY VISION AND GOALS				
6.		CITIZEN ENGAGEMENT				
7.		SELF-ASSESSMENT: BASELINE				
8.		SELF-ASSESSMENT: ASPIRATIONS & IMF	PERATIN	/ES		
PART E	: AREA	BASED PROPOSAL				
9.		SUMMARY				
10.		APPROACH & METHODOLOGY				
11.		KEY COMPONENTS				
12.		SMART URBAN FORM				
13.		CONVERGENCE AGENDA		Table 1		
14.		CONVERGENCE IMPLEMENTATION				
15.		RISKS		Table 2		
16.		ESSENTIAL FEATURES ACHIEVEMENT P	LAN			
17.		SUCCESS FACTORS				
18.		MEASURABLE IMPACT				
PART C	: PAN-0	CITY PROPOSAL(S)				
19.		SUMMARY				
20.		COMPONENTS				
21.		APPROACH & METHODOLOGY				

22.		DEMAND	ASSESSMENT				
23.		INCLUSIO	INCLUSION				
24.		RISK MIT	IGATION		Table 3		
25.		FRUGAL	INNOVATION				
26.		CONVER	GENCE AGENDA	INCE AGENDA Table 4			
27.		CONVER	GENCE IMPLEMENTATION	·	·		
28.		SUCCESS	S FACTORS				
29.		BENEFIT	S DELIVERED				
30.		MEASUR	ABLE IMPACT				
PART D	: IMPLE	MENTATIO	ON PLAN				
31.		IMPLEME	PLEMENTATION PLAN Table 5				
32.		SCENARIOS					
33.		SPV			Table 6 7 DOCUMENTS		
34.		CONVER	GENCE		Table 7		
35.		PPP			Table 8		
36.		STAKEHO	DLDER ROLES				
PART E	: FINAN	ICIAL PLA	N				
37.		ITEMISED	COSTS				
38.		RESOUR	CES PLAN				
39.		COSTS					
40.		REVENU	E AND PAY-BACK				
41.		RECOVE	RY OF O&M				
42.		FINANCIA	FINANCIAL TIMELINE				
43.		FALL-BAC	CK PLAN				
ANNEX	URE 1		Smart City features				
ANNEX	URE 2		A-3 sheets (self-assessment)				
ANNEX	URE 3		max 20 sheets (A-4 and A-3)				
ANNEX	URE 4		Documents for Question 33				

## **INSTRUCTIONS**

- This document must be read along with the Smart City Mission Guidelines. An electronic version of the SCPformat is also available on the website <smartcities.gov.in> Follow: 'Downloads' > 'Memos'.
- 2. The responses must be within the word limits given. The font size must be 12 Arial, with 1.5 spacing, left aligned paragraphs with one inch margins. All additional information must be given in 20 nos. A-4 size pages in Annexure 3.
- 3. For the Area-Based Proposal, only one 'Area' should be selected. The Area selected can be a combination of one or more types of area-based developments. This can be retrofitting or redevelopment or greenfield alone or a combination of these, but the area delineated should be contiguous and not at separate locations in the city.
- 4. The Area-based Development must contain all the Essential Features as per para 6.2 of the Mission Guidelines. Please fill out the following checklist.

S. No	Essential Feature	Confirm if included (✓)	Para. No. in SCP
1.	Assured electricity supply with at least 10% of the Smart City's energy requirement coming from solar		
2.	Adequate water supply including waste water recycling and storm water reuse		
3.	Sanitation including solid waste management		
4.	Rain water harvesting		
5.	Smart metering		
6.	Robust IT connectivity and digitalization		
7.	Pedestrian friendly pathways		
8.	Encouragement to non-motorised transport (e.g. walking and cycling)		
9.	Intelligent traffic management		
10.	Non-vehicle streets/zones		
11.	Smart parking		
12.	Energy efficient street lighting		

13.	Innovative use of open spaces	
14.	Visible improvement in the Area	
15.	Safety of citizens especially children, women and elderly	
16.	At least 80% buildings (in redevelopment and green-field) should be energy efficient and green buildings	
17.	In green-field development, if housing is provided, at least 15% should be in 'affordable housing' category.	
18.	Additional 'smart' applications, if any	

- 5. The pan-city Smart Solution should be IT enabled and improve governance or public services. Cities may propose one or two such Smart Solution(s). If more than one solution is presented kindly use supplementary template 'Pan-City Proposal No 2'.
- 6. In order to make the proposal credible, all claims must be supported with government order, council resolutions, legal changes, etc and such supporting documents must be attached as Annexure 4.
- 7. The Questions can be answered directly in this editable PDF file and can be saved on local computer, before printing. Your submission in electronic form should contain:
  - 1. The SCP in whole (92) pages
  - 2. The Self Assessment Sheet (Annexure 2)
  - 3. Additional 20 Sheets (Annexure 3)
  - 4. Additional list of Documents (Annexure 4)

Electronic submission to be sent on DVD along with printed copies. 5 printed copies of the SCP document (complete in all respect) should be sent to MoUD along with the DVD containing the complete electronic copy. The printed copies should be spiral bound as separate volumes.

It is advised to use latest version of Acrobat Reader (Acrobat XI or higher) to fill the form.

Acrobat Reader XI can be downloaded from:

https://www.adobe.com/support/downloads/thankyou.jsp?ftpID=5507&fileID=5519

#### **SCORING DIVISION**

#### TOTAL 100 POINTS

CITY-LEVEL:	30
AREA-BASED DEVELOPMENT:	55
PAN-CITY SOLUTION:	15

#### CITY LEVEL CRITERIA: 30%

S.No.	Criteria	%
1.	Vision and goals	5
2.	Strategic plan	10
3.	Citizen engagement	10
4.	Baseline, KPIs, self-assessment and potential for improvement	5

#### AREA-BASED DEVELOPMENT (ABD): 55%

S.No.	Criteria	%
1.	'Smartness' of proposal	7
2.	Citizen engagement	5
3.	Results orientation	15
4.	Process followed	3
5.	Implementation framework, including feasibility and cost-effectiveness	25

#### PAN-CITY SOLUTION: 15%

(If more than one solution is proposed, each proposed solution will be graded separately and the average of the two aggregate scores will be awarded to the city toward the 15% overall weightage)

S.No.	Criteria	%
1.	'Smartness' of solution	3
2.	Citizen engagement	1
3.	Results orientation	5
4.	Process followed	1
5.	Implementation framework, including feasibility and cost-effectiveness	5

# **A. CITY PROFILE**

## 1. QUALITY OF LIFE

In the last three years, what efforts have been made by the city to improve livability, sustainability and economic development? Give specific examples along with improvement with KPIs that are in the public domain and/ or can be validated. Your answer should cover, but not be restricted to (Describe in max. 50 words each, mentioning the source of the data):

a. Transportation condition in the city

b. Water availability in the city and reduction in water wastage/ NRW

c. Solid waste management programs in the city

d. Safety/ security conditions in the city

e. Energy availability and reduction of outages in the city

f. Housing situation in the city, specifically role of municipality in expediting building plan approvals, enhancing property tax collection, etc

## 2. ADMINISTRATIVE EFFICIENCY

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):

#### 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

#### 3. **SWOT**

Based on the detailed city profiling, what are the strengths and developmental areas of the city? Conduct a detailed SWOT analysis of the city with all relevant metrics and data. (max 1000 words):

#### 4. STRATEGIC FOCUS AND BLUEPRINT

Based on the SWOT analysis, what should be the strategic focus of the city and the strategic blueprint for its development over next 5-10 years to make it more livable and sustainable? (max 500 words):

continue on next page

#### 5. CITY VISION AND GOALS

What should be the vision of the city based on the strategic blueprint? How does the Vision Statement relate specifically to the city's profile and the unique challenges and opportunities present in your city? Define overall aspirations and goals for the city along with how you see key metrics of livability and sustainability improving over the next 5-10 years? (max 1000 words):

continue on next page

#### 6. CITIZEN ENGAGEMENT

How has city leveraged citizen engagement as a tool to define its vision and goals? Specifically describe (max 150 words each):

a. Extent of citizens involved in shaping vision and goals

b. Engagement strategy to get best results from citizens

c. Different means of citizen engagement adopted

d. Extent of coverage of citizen engagement in different media and channels

e. Incorporation of citizen inputs in overall vision

#### 7. SELF-ASSESSMENT: BASELINE

Define the baseline for your city based on self-assessment criteria given in Annexure 2 (column 'H'). Marks will be awarded based on how well you know your city (Fill column 'I' in the self assessment sheet in Annexure 2 with as many KPIs and "hard metrics" as possible; max 50 words per cell)

Note: Attach Annexure 2

#### 8. SELF-ASSESSMENT: ASPIRATIONS & IMPERATIVES

Emerging from the vision statement, assess the qualitative or quantifiable outcomes that need to be achieved for each of the Smart City Features described in Annexure 2 (column 'J'). In column 'K' describe the biggest single initiative/solution that would get each feature of the city to achieve 'advanced' characteristics (eg. increasing share of renewable energy generation in the city by X percent). Note that a single initiative/solution may impact a number of features (eg. improved management of public spaces may ease congestion on roads as well as improve public health). (Fill in Annexure 2; max 50 words per cell)

Note: Attach Annexure 2

## **B. AREA-BASED PROPOSAL**

The area-based proposal is the key element of the proposal. An area-based proposal will identify an area of the city that has been selected through desk research, analysis, meetings with public representatives, prominent citizens, 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 Features/Elements prescribed in the Mission Guidelines and any additional features that are deemed to be necessary and appropriate.

Mapping of information and data is a key part of your Smart City Proposal. 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 the base map, represent, with the most effective method available, as much information and data about the 'Area' selected for area-based development. Only one 'Area' should be selected and attached in the form of a map containing the spatial and physical layout/morphology of the Area, 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. The Essential Elements and additional features that are proposed to be part of the area-based development should be included. 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)

#### 9. SUMMARY

Summarize your idea for an area-based development. (max. 100 words)

#### 10. APPROACH & METHODOLOGY

What is the approach and methodology followed in selecting/identifying the area-based development? Describe the reasons for your choice based on the following (max. 1000 words):

- a. The city profile
- b. Citizen opinion and engagement
- c. Opinion of the elected representatives
- d. Discussion with urban planners and sector experts
- e. Discussion with suppliers/ partners

continue on next page

#### 11. KEY COMPONENTS

List the key components of your area-based development proposal (eg. buildings, landscaping, on-site infrastructure, water recycling, dual piping for water supply, etc.)? (max. 250 words)

#### 12. SMART URBAN FORM

Describe the 'smart' characteristics of the proposed development that relate to urban form (eg. uncluttered public places, mixed-use, open spaces, walkability) and how these will be incorporated. (max. 250 words)

## 13. CONVERGENCE AGENDA

In Table 1, list the Missions/Programmes/Schemes of the Government of India (eg. AMRUT, HRIDAY, SBM, IPDS, Shelter for All, Digital India, Make in India, Skill India) and relevant external projects and describehow your proposal will achieve convergence with these, in terms of human and financial resources, common activities and goals. (max. 50 words per cell)

	TABLE 1				
S.No	Mission/Programme/	How to achieve convergence			
	Scheme/Project				
1					
2					
3					
5					

Continue on next page

	TABLE 1	
S.No	Mission/Programme/ Scheme/Project	How to achieve convergence
4		
5		
6		
7		

#### 14. CONVERGENCE IMPLEMENTATION

Describe how the convergence will be implemented? For example, convergence with IPDS will be credible if 'smart' city elements (e.g. smart metering, underground cabling, shifting of transformers) are included in the DPR being prepared for IPDS. If, a DPR has already been prepared, then the 'smart' elements should be included in the form of a supplementary DPR. Furthermore, according to the IPDS Guidelines the DPR has to be approved by the State Government and sent to the Ministry of Power, Government of India. All these have to be completed before submitting the proposal. (max. 350 words)

#### 15. **RISKS**

What are the three greatest risks that could prevent the success of the area-based proposal? In Table 2, describe each risk, its likelihood, the likely impact and the mitigation you propose. (max. 50 words per cell)

Risk	Likelihood	Impact	Mitigation	

TABLE 2				
Risk	Likelihood	Impact	Mitigation	

Continue on next page

TABLE 2				
Risk	Likelihood	Impact	Mitigation	

#### 16. ESSENTIAL FEATURES ACHIEVEMENT PLAN

Describe a plan for achieving the Essential Features in your area-based proposal. Importantly, accessible infrastructure for the differently-abled should be included. List the inputs (eg. resources) that will be required for the activities that you will conduct, leading to the outputs. Please note that all Essential Elements, item-wise, have to be included in the area-based proposal. (max. 2000 words)

Continue on next page

## 17. SUCCESS FACTORS

Describe the three most significant factors for ensuring the success of the area-based development proposal. What will your city do if these factors turn out to be different from what you have assumed? (max. 500 words)

Page 40 of 92

# 18. MEASURABLE IMPACT

What will be the measurable impact of the area-based development proposal, on the area and the wider city, through scale-up and replication? Please describe with respect to the five types below, as relevant to your city and proposals (max. 150 words each):

a. Governance Impact (eg. improvement in service provision and recovery of charges due to establishment of SPV)

b. Spatial Impact (eg. built form changed to incorporate more density or more public space)

c. Economic Impact (eg. new commercial space created for organized economic activity)

d. Social Impact (eg. accessible features included in the Proposal)

e. Sustainability, including environmental impact (eg. intensive 24X7 use of public spaces results in reduced traffic and reduced pollution)

# C. PAN-CITY PROPOSAL (S)

A pan-city smart solution should benefit the entire city through application of ICT and resulting improvement in local governance and delivery of public services. The SCP should contain one or two such Smart Solutions. Generally, 'smartness' refers to doing more with less, building upon existing infrastructural assets and resources and proposing resource efficient initiatives.

#### 19. SUMMARY

Summarize your idea(s) for the pan-city proposal(s). (max. 100 words)

## 20. COMPONENTS

List the key components of your pan-city proposal(s). (max. 250 words)

#### 21. APPROACH & METHODOLOGY

What is the approach and methodology followed in selecting/identifying the pan-city proposal(s)? Describe the reasons for your choice based on the following (max. 1000 words):

- a. The city profile and self assessment;
- b. Citizen opinion and engagement
- c. Opinion of the elected representatives
- d. Discussion with urban planners and sector experts
- e. Discussion with suppliers/ partners

#### 22. DEMAND ASSESSMENT

What are the specific issues related to governance and public services that you have identified during city profiling and citizen engagement that you would like to address through your pan city proposal(s)? How do you think these solution(s) would solve the specific issues and goals you have identified? (max.1000 words)

# 23. INCLUSION

How inclusive is/are your pan-city proposal(s)? What makes it so? (max. 150 words)

# 24. RISK MITIGATION

What are the three greatest risks that could prevent the success of the pan-city proposal(s)? In table 3, describe each risk, its likelihood, the likely impact and the mitigation you propose. (max. 50 words per cell)

	TABLE 3				
Risk	Likelihood	Impact	Mitigation		
	1				

TABLE 3				
Risk	Likelihood	Impact	Mitigation	
		l		

TABLE 3				
Risk	Likelihood	Impact	Mitigation	

## 25. FRUGAL INNOVATION

Which is the model or 'best practice' from another city that you are adopting or adapting in your proposal(s)? How are you innovating and ensuring best use of resources? Is there an aspect of 'frugal innovation' in your proposal(s)? (max. 500 words)

## 26. CONVERGENCE AGENDA

In Table 4, list the Missions/Programmes/Schemes of the Government of India (eg. SBM, AMRUT, HRIDAY, Shelter for All, Digital India, Make in India, Skill India) and relevant external projects and describe how your proposal(s) will achieve convergence with these, in terms of human and financial resources, common activities and goals. (max. 50 words per cell)

	TABLE 4					
S.No	Missions/Programmes/Schemes/Projects	How to achieve convergence				
1						

	TABLE 4					
S.No	Missions/Programmes/Schemes/Projects	How to achieve convergence				
2						
3						
4						

	TABLE 4				
S.No	Missions/Programmes/Schemes/Projects	How to achieve convergence			
5					
6					
7					

# 27. CONVERGENCE IMPLEMENTATION

Describe how the convergence will be implemented? (max. 350 words)

## 28. SUCCESS FACTORS

Describe the three most significant factors for ensuring the success of the pan-city proposal(s). What will your city do if these factors turn out to be different from what you have assumed? (max. 250 words)

## 29. BENEFITS DELIVERED

How will you measure the success of your pan-city proposal(s) and when will the public be able to 'see' or 'feel' benefits: immediately, within Year 1, or in the medium or long term, 3-5 years? (max. 150 words)

#### 30. MEASURABLE IMPACT

What will be the measurable impact of your pan-city proposal(s)? Please describe with respect to the following types given below, as relevant to your city and proposals (max. 150 words)

a. Governance Impact (eg. government response time to citizen complaints halved, creating faster service delivery overall)

b. Impact on public services (eg. real-time monitoring of mosquito density in the atmosphere reduces morbidity)

# D. IMPLEMENTATION PLAN

## 31. IMPLEMENTATION PLAN

In Table 5, describe the activities/components, targets, resources and timelines required to complete the implementation of your area-based development and pan-city solution/s. This should include the items mentioned as Essential Features in Q. No. 16 plus other 'smart' solutions, including accessible infrastructure for differently-abled. (max. 50 words per cell)

	Table 5						
S N o	Activity/component	Indicator	Baseline (as on)	Target	Resources required	Likely date of completion	
		AREA-E	BASED DEVEL	OPMENT			
1							
2							

S   Activity/component   Indicator   Baseline (as on)   Target     N   0   0   0   0	Resources required	Likely date of completion
N 0		completion
3		
4		
5		

	Table 5						
S	Activity/component	Indicator	Baseline (as on)	Target	Resources required	Likelydate of	
N O			(			of completion	
6							
7							
8							
	1	1	1	1	I	I	

			Table 5			
S	Activity/component	Indicator	Baseline (ason)	Target	Resources required	Likely date of
N			(as on)		required	completion
0		PAN-0	CITY SOLUTIO			
1						
2						
-						
3						

	Table 5						
S	Activity/component	Indicator	Baseline (ason)	Target	Resources required	Likely date of completion	
N O			(00 011)			completion	
4							
·							
5							
Ũ							
6							
0							
1							
1							
1							
1							
1							
1							
1							
1							

#### 32. SCENARIOS

Using information from Table 5, describe the critical milestones, realistic timelines and sequencing of efforts and events that you are projecting as the short-, medium- and long-term scenarios for your smart city. If necessary, include PERT and CPM charts in Annexure 3. (max. 500 words)

#### 33. **SPV**

The SPV is a critical institution for the implementation of the Proposal. Describe the SPV you propose to create in your city, with details of its composition and structure, leadership and governance, and holding pattern. Based on your responses in Table 6 describe how you envision the SPV to fulfill the role set out in the Mission Guidelines. (max. 500 words)

	Table 6 (CHECKLIST: supporting documents for 1-7 must be submitted in Annexure 4)	
S. No.	Activity	Ye s/No
1.	Resolution of the Corporation/Council approving Smart City Plan including Financial Plan.	
2.	Resolution of the Corporation/Council for setting up Special Purpose Vehicle.	
3.	Agreement/s with Para Statal Bodies, Boards existing in the City for implementing the full scope of the SCP and sustaining the pan-city and areabased developments.	
4.	Preliminary human resource plan for the SPV.	
5.	Institutional arrangement for operationalisation of the SPV.	
6.	If any other SPV is operational in the City, the institutional arrangement with the existing SPV	
7.	Additional document/s as appropriate	

# 34. CONVERGENCE

In Table 7, give details of 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 activities/components (both area-based and pan-city) you have identified. (In Annexure 3, include a flowchart showing the network/relationships that the SPV will form with government and non-government agencies, and indicating the nature of connection with each entity.) (max. 50 words per cell)

	TABLE 7						
S.No	Activity/Component	Department/agency/ organization	Role/responsibility				
1							
2							
3							

	TABLE 7					
S.No	Activity/Component	Department/agency/ organization	Role/responsibility			
4						
E						
5						
6						
7						

TABLE 7						
S.No	Activity/Component	Department/agency/ organization	Role/responsibility			
8						
9						
10						
11						

#### 35. **PPP**

In Table 8, give details of all the private companies/corporations/organizations that need to be engaged with the execution and operations &maintenance of the various activities and componentsenvisaged in this proposal, along with a description of their roles and responsibilities as basic TORs. Use appropriate terms such as 'vendor', 'concessionaire', 'JV partner', etc. (max. 50 words per cell)

		TABLE 8	
S. No	Activity/Component	Company/corporation/ organization	Role/responsibility (basic TOR)
1			
2			
3			

	TABLE 8		
S.	Activity/Component	Company/corporation/	Role/responsibility
No		organization	(basic TOR)
4			
5			
6			
7			

	TABLE 8		
S.	Activity/Component	Company/corporation/	Role/responsibility
No		organization	(basic TOR)
8			
9			
10			
11			

### 36. STAKEHOLDER ROLES

Attach one A-4 sheet (part of 'Annexure 3'), containing an organogram showing the relationships:

- a) MPs, MLAs, MLCs.
- b) Mayors, Councilors, other elected representatives.
- c) Divisional Commissioner
- d) Collector
- e) Municipal Commissioner
- f) Chief Executive of the Urban Development Authority/ Parastatal
- g) Consultant (Select from empanelled list)
- h) Handholding Organisation (Select from following list: World Bank, ADB, JICA, USTDA, AFD, KfW,
- DFID, UN Habitat, UNIDO, Other)
- i) Vendors, PPP Partners, Financiers
- j) Others, (eg. community representatives) as appropriate to your city

# E. FINANCIAL 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 (refer Questions 13 and 26), and the finance that can be raised from the financial market.

#### 37. ITEMISED COSTS

What is the total project cost of your Smart City Proposal (SCP)? Describe in detail the costs for each of the activities/components identified in Questions 31. (Describe in Max. 300 words)

#### 38. RESOURCES PLAN

Describe the financing sources, the own-sources of income, the financial schemes of the Central or State governments for which your city/SPV is eligible, which can be used to fund the SCP proposals and pay back loans. Briefly describe an action-plan for resource improvement to make the ULB financially self-sustaining. (max. 1500 words)

## 39. COSTS

What is the lifetime cost estimated for your area-based development and your pan-city solution/s? Add O&M costs wherever applicable. (max 500 words)

#### 40. REVENUE AND PAY-BACK

How will the area based development and the pan-city smart solutions(s) of your city 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)

#### 41. RECOVERY OF O&M

What is your plan for covering the Operations & Maintenance costs for each of the activities/components identified in Questions 31? (max. 1000 words)

#### 42. FINANCIAL TIMELINE

What is the financial timeline for your smart city agenda? Describe the milestones and target dates related to fund flows, payback commitments, etc. that must be adhered to for the proposal to achieve the vision set out in Table 5 (question 31)? (max. 1 page: A4 size)

#### 43. FALL-BACK PLAN

What is your plan for mitigating financial risk? Do you have any alternatives or fall-back plans if the financial assumptions do not hold? (max. 250 words)

S. No	Feature	Definition
1.	Citizen participation	A smart city constantly adapts 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)
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 wastewater recycling, smart meters, rainwater 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)

#### Self-Assessment Form

Attach self-assessment format given in supplementary template (Excel sheet), with columns I-L duly filled

#### Twenty sheets ( A-4 and A-3) of annexures, including

#### annexures mentioned in questions 32, 34, 36

S. No	Particulars	✓
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

(Supporting documents, such as government orders, council resolutions, response to Question 33 may be annexed here)

S. No	Particulars	✓
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	