



Government of India
Ministry of Housing and Urban Affairs
Smart Cities Mission

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SmartProcure- Guidelines on Procurement of solutions on City Innovation Exchange Platform

1. Background:

The magnitude, complexity and diversity of challenges facing Indian cities make it immensely important for urban administrations to nurture and adopt innovative practices in the development of infrastructure and services for city improvement. The City Innovation Exchange (<http://cityinx.niua.org/>), hereinafter referred to as CI^X was launched with the intention to act as a bridge between urban administrations and innovators so as to foster co-creation of innovative urban solutions. CI^X endeavours to reduce the risks associated with procurement of innovative solutions and lower the barriers for innovators as they ideate, test, create and deploy their solutions in real world environments.

It is in this background that these procurement guidelines have been framed to innovate the procurement of innovative solutions. They will:

- Help urban administrations harness the strengths of the Indian innovation ecosystem in finding solutions to cities' challenges,
- Nurture entrepreneurship and investments in India's urban/ urban-tech sectors,
- Most importantly, benefit communities through creation of context-specific, effective solutions for their needs.

2. Definitions:

2.1. Authority: includes the Smart City SPV, and any other department/ organization/ urban local body authorized by the State Government for hosting challenges/ seeking solutions on CI^X.

- 2.2. Accelerator:** An Accelerator provides mentorship to companies with at least a ready version of the product, helping them scale-up.
- 2.3. City Innovation Exchange (CI*):** A digital platform developed by the Smart Cities Mission to nurture entrepreneurship, support procurement of innovations by cities through a transparent & collaborative process.
- 2.4. Bid(s):** means the technical-cum-commercial offers submitted by Bidders in response to and in accordance with the Bid Document under the Bid Challenge Process.
- 2.5. Bidder:** Any respondent to the Bid, other than the Proponent who participates in the Bid Process for award of the Bid.
- 2.6. Bid Challenge Process:** means the single-stage two-packet process or the two-stage process with the second stage of online reverse/forward-auction. The process will be conducted through open competitive bidding for selection of the agency to execute the project as finalised by the Authority, with the provision of Right of First Refusal (ROFR) and plan compensation for the Proponent.
- 2.7. Internal Innovation Committee (IIC):** It is an empowered committee constituted by the Authority for assessing the feasibility of a proposed solution and recommending the selection of innovator for approval to the Authority. The IIC may comprise 3 to 4 members, with recommended composition being as under:
1. Smart City CEO/Head of Organization
 2. Independent Director/ Member of the SPV board
 3. Subject Matter Expert/Domain Expert from Industry/Academic background
 4. Business management expert from Partner Incubator or Entrepreneur of repute
- 2.8. Detailed Solution Architecture (DSA):** A detailed report of the project/scheme to be prepared by the Selected Startup outlaying the planning and implementation of the project/scheme. The report shall contain detailed technical specifications of the technology used and detailed process flow, evaluation of the existing resources, detailed layout and flow diagrams for implementation, time schedule for implementation, quantification of work, detailed financial analysis outlining the cost and earnings projections, parameters for bid documentation and any other information relevant to the project/scheme.
- 2.9. Incubator:** Institutions that support entrepreneurs in developing their businesses, especially in initial stages. These are organizations geared towards speeding up the growth and success of start-ups and early-stage companies.
- 2.10. Proponent:** shall mean the Startup whose solution is considered by the Authority for the Bid Challenge Process in accordance with these guidelines.
- 2.11. Qualified Solution:** is a complete commercial end product that has been successfully proven in the actual operational environment in the city. It should have successfully

completed at least 3 pilots in urban settings and scored an average of more than 70 in its evaluation under the CI^x platform.

2.12. Selected Pilot Solution: means the Solution recommended by the IIC and approved by the Authority for implementation of a pilot under this Guideline.

2.13. Selected Startup: shall mean the Startup whose solution is selected by the Authority as a Pilot Solution for implementation of the Pilot.

2.14. Startup: Any person or legal entity recognised by Department for Promotion of Industries and Internal Trade (DPIIT) or with the State Government as a registered startup or is registered with the nodal agency for implementation of innovation or startup policies notified by National or State governments.

2.15. Unsolicited Proposal: An Unsolicited Proposal is a submission by a Startup for a new or innovative idea or solution submitted to the Authority on the initiative of the offeror for the purpose of obtaining a procurement contract with the Authority, and is not in response to a request for proposal, tender, announcement, expression of interest, or any other Government-initiated solicitation or program.

Note: words importing the singular shall also include the plural and vice versa where the context requires.

3. Process Flow: The steps encompassing SmartProcure would be as follows:

3.1. Problem Statement Definition: The Authority is expected to identify critical problem areas for their cities in consultation with stakeholders ranging from academic institutions, industry, community organizations, citizens during this phase. Critical problem areas so identified would be thrown open for seeking innovative solutions on CI^x.

3.2. Composition of problem statements: Critical problem areas as identified above will be framed into problem statements on the CI^x platform for inviting solutions from Startups. A solution can be a design / idea / prototype / product / service / application or any other solution proposed for solving the problem statement. The problem statements will be hosted on the CI^x platform by the Authority. A problem statement shall have a clearly defined goal and an understanding of the gap between current state and the stated goal. Where possible, the goal and the gap should be quantifiable and measurable.

3.3. Hosting of problem statements: The hosted problem statement should provide sufficient details with regards to the problem area, including *inter alia* site/project details, any gaps/constraints in existing solution approaches, demographic profile and proportion of stakeholder impacts, desired functional and operational requirements from the solution, expected outcomes, scalability requirements, and date of submission of proposed solution by Startups.

- 3.4. Unsolicited Proposal:** Startups can also submit unsolicited proposals using the relevant provisions of CI^x. The consideration of Unsolicited Proposals will be at the sole discretion of the Authority. On receipt of such proposals through CI^x, in case the Authority finds prima-facie merit in the proposed solution, the same shall be forwarded by the Head of the Authority to the IIC for pre-feasibility study as laid down in para 3.5 below. In case where the Authority receives similar proposal from two or more Startups, then the order of priority for examination of the proposal will be the time/date of receipt by the Authority on CI^x. The further steps for processing the proposal shall remain the same as applicable for proposals solicited by the Authority on CI^x.
- 3.5. Evaluation of Pilotable Solution:** The solutions submitted by the Startups, including the technical and financial proposal for the problem statement will be examined through the evaluation process as laid down by the city. A model evaluation framework has been provided in this document for guidance of cities at Annexure 3. A detailed checklist, available at Annexure 1, shall be filled by the Startup and submitted to the Authority, along with the proposal. The evaluation of solutions and drawing of recommendations for selection of Pilot Solution will be done by the IIC. The IIC may seek any clarification or supplemental information from the Startup for evaluation of the proposal.
- 3.6. Selection of proposals for piloting:** The recommendations of the IIC will be submitted for approval of the Authority, which will take the final decision to allow piloting of such solutions.
- 3.7. Implementation of Pilot:** The selected Pilot Solution, if approved by the Authority, shall be implemented in the city to assess the performance of the solution, and to fine-tune it to meet the requirements of the city.
- 3.8. Funding of Pilots:** In case any funding /grant is required by the Selected Startup for implementing the Pilot Solution, then the Authority may consider funding of the same. Such funding should be limited to a maximum of Rs. five lakh per pilot. Provided that, the Authority/Startup can raise or identify additional or convergent sources of funding for implementing the Pilot Solution.
- 3.9. Evaluation of Pilot Implementation:** The city shall execute pilot implementation with Selected Startup to understand:
- 3.9.1. The functional capabilities and effectiveness of the solution.
 - 3.9.2. Performance, reliability and capability for full-scale procurement, final deployment or mass usage.
 - 3.9.3. Risks and gaps of the solution.

A summary report of the pilot is to be prepared by the Selected Startup after end of the pilot for consideration of the Authority. Based on the success of the Pilot, the Authority will take a decision whether to scale up the solution or not.

3.10. DSA Preparation: If the Pilot Solution is found to be successful post evaluation, then the successful Pilot Solution will be taken through an acceleration process, where, if required, a DSA for the solution will be prepared for commercial implementation. At this stage, the scope and value of the implementation project will be finalised by the Authority, in consultation with IIC. The Financial Proposal of the Selected Startup submitted initially in response to the problem statement, will be moderated at this stage and the Bid value arrived at after due analysis will be frozen.

3.11. If the Selected Startup is not agreeable to the moderations suggested by the Authority or if the selected Startup is unable to participate in the procurement process due to any reason, the Authority shall have the right to initiate the procurement process for the modified proposal within 30 days of receiving the refusal from the Selected Startup. However, on such refusal, the Selected Startup shall have no other right or claim on the Authority. Provided that, if the Startup owns any IPR of the solution, then the Selected Startup will be eligible to receive Royalty payment for use of the IPR as due and fair compensation for its use. Provided further that the methodology to arrive at the amount of Royalty payment shall be as stated under para 5 of this Guideline.

3.12. Incubation and Acceleration: If required, the Selected Startup may be taken up for incubation and/ or accelerated development for commercial deployment readiness by the Authority by connecting them to an Incubator/Accelerator. This will help the Selected Startup gain access to mentorship, seed financing, facilitate national level or city level links with VC funds, development partners, mentors and other handholding support, provide technical advisory, and generate awareness of various government benefits for Startups.

3.13. Qualified Solutions: For solutions that are certified as “Qualified Solutions” on CI^x, it may not be necessary to conduct a pilot implementation and the Authority may decide to undertake procurement as per norms under para 3.9 above.

3.14. Based on the overall value of the project, the procurement decision will be undertaken as per the following norms.

3.14.1. Value upto Rs. 20 Lakh: For project value upto Rs. 20 Lakh, including the funding grant used for the pilot study, direct procurement from the selected Startup can be undertaken by the city Authority.

3.14.2. Value above Rs. 20 Lakh upto Rs. 1 crore: Procurement shall be done under a “Bid Challenge” process where the DSA will be converted into a Request for Proposal and Bids will be invited in a limited bid from all Startups.

3.14.3. Value above Rs. 1 crore: Procurement shall be done under the “Bid Challenge” process where the DSA will be converted into a Request for Proposal (RFP) and Bids will be invited from all firms based on a qualification and eligibility criteria as defined by the Authority. The procurement guidelines of the Authority may be

followed for defining the eligibility / evaluation criteria. All relaxations as per the prevailing policies of the Central / State Government shall be made to facilitate participation of Startups on a level playing field in the Bid process.

3.14.4. The Selected Startup, whose Pilot Solution is processed for the Bid Challenge stage shall be declared the Proponent of the Solution. The Proponent shall provide an undertaking to the Authority as given in Annexure 1 of the guidelines with regard to acceptance of the Bid Challenge Process.

3.14.5. The Proponent under Bid Challenge shall be given the Right of First Refusal (ROFR) and will be eligible for Plan Compensation for his Solution in case he/she is not the successful Bidder on completion of the Bidding.

4. Bid Challenge Process:

4.1. Bid Document preparation: Where the value of implementation project is above Rs. 20 Lakh, the approved solution will be taken through a bidding process by the Authority. While preparing the RFP, due care may be taken to bridge the knowledge asymmetries between the Proponent and other prospective bidders by sufficient detailing in framing the Terms of Reference (ToR), Bills of Quantities (BoQ), technical specifications, etc. without compromising on the IPRs, Trade / Commercial secrets of the Proponents, if any.

4.2. Invitation of Bids: RFP shall be issued as per the guidelines for tendering followed by the Authority and the invited Bids shall be evaluated by the Bid Evaluation Committee formed by the Authority. The recommendations of the Bid Evaluation Committee will be submitted to the Authority for acceptance. The successful Bidder, selected as per the evaluation criteria, will be notified by the Authority and the process for Bid Challenge shall be initiated in case the Proponent is not the successful Bidder.

4.3. Bid Challenge Stage: On opening of the Bids, in case the Proponent is not the successful Bidder, then it shall exercise the ROFR within 15 days of notification of the successful Bidder and attempt to match the Bid of the successful Bidder. If the Proponent is able to match the Bid of the successful Bidder, then it will be declared as the Selected Bidder, and the contract shall be awarded to him. In case the Proponent does not wish to exercise ROFR, the contract shall be awarded to the successful Bidder who shall be declared as the Selected Bidder and the Proponent will be eligible for payment of Plan Compensation for conceptualizing the solution, which shall be paid by the Successful Bidder.

The Plan Compensation will be defined during the Bid stage and shall be an amount exclusive of all applicable taxes and duties, equal to [2.5%]¹ of the Bid Value. The maximum compensation payable to the Proponent would be [Rs. 1 (one) crore]². This

¹The city may decide on the percentage of plan compensation.

²The city may decide on the value of plan compensation.

amount would be in lieu of the cost incurred by the Proponent for its efforts, IPR and works undertaken by it in conceptualisation of the Project.

4.4. Letter of Award and Signing of Contract: The Selected Bidder will be issued the Letter of Award within 7 days of conclusion of the Bid Challenge Stage and the Authority shall enter into a contract for implementation of the solution.

5. Intellectual Property Rights (IPR):

5.1. The ownership of Intellectual Property Rights (IPR), if any, generated under the project shall vest with the Startup who has developed the Solution. The Solution may be procured by other Government entities, either directly or through any other agency. Provided, in case of implementation through another agency, the selection of such agency will be through conduct of an open and transparent bidding process. In such case, the Startup owning the IPR shall not claim any exclusive right on the solution.

5.2. The use of a solution containing IPR by any other city/Government entity will be subject to payment of Royalty to the Startup owning the IPR, where such Startup is not selected as the executing agency in the procurement process. The amount of Royalty shall not exceed the amount of Plan Compensation, arrived at the time of selection of successful Bidder in the first instance, and shall be proportionately increased or reduced in accordance with the value of the contract. The royalty shall be payable by the Selected Bidder in the new city where the Solution having IPR is planned for execution.

Annexure 1: Checklist for assessment of Startup Solution by the Internal Innovation Committee (IIC)

S. No.	Description	Yes/No	Particulars	Remarks
I. General Information on the Project				
1	Define the proposal			
2	Establish whether it is a new or innovative proposal or not and explain the reason for the project being new or Innovative			
3	Characteristics of the Project			
4	Cost and Other Details			
5	State whether the certificate has been submitted by the Proponent adhering to the Bid Challenge Process			
6	Details of possible competing projects and likely impact of the project on the competing project			
II. Assessment of Need of the project				
1	Nature of intended use			
2	Justification of need			
III. Details on innovative technology (applicable in case of new technology)				
1	State details of innovative technology used for the project			
2	Is the technology proprietary and only available to a few?			
3	(a) Why should the Authority go for this technology only?			
	(b) What if sourcing of another technology has to be made in future during the life of the project for any reason?			
IV. Eligibility of the Startup to undertake the project				
1	Is proponent planning to undertake the project on its own or through a consortium to meet the technical, financial and technological needs? Please elaborate			
V. Prefeasibility report				
1	State whether the Startup has conducted prefeasibility			
2	State whether the preliminary financial viability of the project has been done			
3	State whether the Startup shall undertake all the studies which are required within the given timeframe			

VI. Project Financials				
1	Service/ Output levels (Specify if applicable)			
2	Estimate Expenditure/earning of the Authority and their variation with time			
3	Provide all IRR/NPV, or other financial details of the project w.r.t. costs and earnings from operations and other forms			
VII. Environmental assessment				
1	State whether the environmental assessment is required for the project			
2	State whether the Startup has mentioned all related approvals required for the project			
VIII. Qualification of Startup				
1	State whether the Startup satisfies the qualification criteria regarding registration with the Central / State Governments			
3	Any other, if required			
IX. Any other				
	Any other item/ observation which are relevant?			

Dated

(Signature,
Name and Designation of
Authorized Representative of
Proponent)

Note:

- 1 The above format could be modified, or additional information sought by the Authority any time in future.
- 2 The above reply must be provided by the Startup to the Authority.

Annexure 2: Certificate provided by Proponent accepting Bid Challenge Process

IT IS CERTIFIED THAT:

1. The..... (Name of project) has been submitted by the undersigned as the duly authorized representative of..... (Name of Proponent) under the Bid Challenge Process. The Proponent will support fair competition through the Bidding Process of the Authority to obtain the best bid. The Proponent agrees to the approved bidding documents, Agreement form and other terms and conditions of the Authority as per their policy.
2. The Proponent does not expect to receive reimbursement of project development cost (pre-feasibility or any other studies); in case the project is not approved by the Authority, or the Authority decides not to proceed with project for any reason at later stage before the Bidding Process. Any reimbursement to the Proponent would be governed strictly as per the policy of the Authority.
3. It is also certified that in past 5 years the Proponent has not been barred or blacklisted for unsatisfactory performance by any Central Government, State Government or Semi-Government Agency.

That the above statements are true to the best of my knowledge and belief.

Dated:

*(Signature,
Name and Designation of
Authorized Representative of
Proponent)*

Annexure 3: Model Evaluation Framework and classification of pilot solutions

CI^x Solution Evaluation framework:

The framework comprises 4 parameters—Relevance, Advantages, Value/Return on Investment (RoI), and Startup Capability. The parameters **Relevance & Advantages** have sub-parametric attributes which are each scored discretely and then added up as the overall score for each parameter. The parameters **Value/RoI and Innovator Capability** is divided as categories (Low, Medium, and High), to score the same, a category has to be selected and a score can be given anywhere in the range for that particular category. The total score for a solution is arrived by adding the individual scores and scoring against 100.

1	Relevance [30]	Challenge-Solution Fit [10] On a scale of 1-10 does the solution address the specific requirements of the challenge statement.	User-friendly [7] On a scale of 1-7 how user-friendly is the solution for end-users and level of insights it generates for decision-making	Deployment Readiness [7] On a scale of 1-7 how deployable is the solution based on existing regulations/compliance and technology systems in the city	Replicability [6] The solution has a potential to emerge as a standardised solution which aligns with EoL/DMAF/CSAF/MP I/SDGs and can be replicated across multiple cities
2	Advantages [30]	Technology Advantage [10] On a scale of 1-10 does the solution have the optimal choice of technology based on: 1. Integration with existing technologies 2. Life-cycle cost 3. Degree of locally sourced technology & know-how 4. Has documented performance/efficiency improvements over existing technologies	Solution uniqueness [6] On a scale of 1-6 is the solution 1. Patented or has IPR to prove uniqueness & novelty 2. Future readiness to interact with emerging technologies 3. Competing products in the market	Ease of Adoption [7] On a scale of 1-7 is the solution easy to adopt at scale with existing capacity in the city	Scalability [7] On a scale of 1-7 does the solution have potential to replicate in other parts of city and be scaled city-wide

#		<i>Low</i>	<i>Medium</i>	<i>High</i>
3	Value/Return on Investment (RoI) [20]	Low/average potential for demonstrating quantified gains of value/impact throughout the solution lifecycle Score between 0-5	Solution demonstrates potential for quantified gains of <=5X value/impact throughout the solution lifecycle. Solutions demonstrating gains of 5X and above can be scored 10 and above Score between 6-13	Solution demonstrates potential for quantified gains of <=10X value/impact throughout the solution lifecycle. Solutions demonstrating gains of 10X and above can be scored 18 and above Score between 14-20
4	Innovator Capability** [20] Domain Expertise + Team Capability + Company Maturity + Commercial Partnerships	The individual/team has moderate tech/domain expertise & capabilities and lacks experience of implementing or managing similar projects. Score between 0-4	Team has significant tech/domain expertise and has proven capabilities of successfully deploying/implementing similar solutions with alternate sector/market. Moderate financial capabilities with focus on investments for expansion. Limited network of partners in the ecosystem to offer resources and capabilities to deploy solutions in urban ecosystems. Score between 5-11	The team has strong tech/domain expertise and execution capabilities and strong track record in successfully deploying/implementing similar solutions with alternate sector/market. The company is matured with manpower resources in leadership, technical, operations & commercial areas and is financially strong. Strong network or partners to offer resources, capabilities for production, integration & other support to deploy solutions in urban ecosystem. Score between 12-15

** Innovators/firms capabilities can also be evaluated on added factors like number of Patents, Publications and IPRs registered to the company, number of formal awards or recognition by government and technology & IT industry bodies.
