

## Market Consultation Questionnaire

### Hybrid Annuity Model (HAM)

This questionnaire aims to gather your inputs on capabilities, preferences, and challenges related to adopting HAM and/or PPP (Public Private Partnership or Purchasing Power Parity) for the upcoming Rajasthan Urban Infrastructure Development Project Phase-V. The project encompasses areas such as water supply, wastewater collection systems, treatment and reuse, CETP, solid waste management, flood management, urban mobility and parking, and IT interventions, including command-and-control centers.

Your responses will help shape the evaluation criteria, contract packaging, risk allocation strategies, payment security terms, and Key Performance Indicator (KPI) frameworks. Further details about RUIDP Ph-V are provided in **Annexures 1 and 2** below.

### Primary Information

#### **Company Profile and Overview**

*Provide a brief overview of your company.*

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                          |                                                       |                               |                                                 |                                                     |                                                          |                                                 |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------|-------------------------------|-------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------|-------------------------------------------------|--|
| <b>Full legal name of organization:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                          |                                                       |                               |                                                 |                                                     |                                                          |                                                 |  |
| <b>Country of registration or incorporation or residence:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                          |                                                       |                               |                                                 |                                                     |                                                          |                                                 |  |
| <b>Contact Name and email address:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                          |                                                       |                               |                                                 |                                                     |                                                          |                                                 |  |
| <b>Company address:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                          |                                                       |                               |                                                 |                                                     |                                                          |                                                 |  |
| <b>No. of years of operation:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                          |                                                       |                               |                                                 |                                                     |                                                          |                                                 |  |
| <b>Website address:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                          |                                                       |                               |                                                 |                                                     |                                                          |                                                 |  |
| <b>Contact No.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                          |                                                       |                               |                                                 |                                                     |                                                          |                                                 |  |
| <b>Domain experience (Construction and O&amp;M):</b><br>(Please choose from the options below.)<br><br><table><tr><td><input type="checkbox"/> Water</td><td><input type="checkbox"/> Wastewater treatment / Reuse</td></tr><tr><td><input type="checkbox"/> CETP</td><td><input type="checkbox"/> Urban mobility/parking</td></tr><tr><td><input type="checkbox"/> Flood Management /Drainage</td><td><input type="checkbox"/> IT, command and control centers</td></tr><tr><td><input type="checkbox"/> Solid Waste Management</td><td></td></tr></table> | <input type="checkbox"/> Water                           | <input type="checkbox"/> Wastewater treatment / Reuse | <input type="checkbox"/> CETP | <input type="checkbox"/> Urban mobility/parking | <input type="checkbox"/> Flood Management /Drainage | <input type="checkbox"/> IT, command and control centers | <input type="checkbox"/> Solid Waste Management |  |
| <input type="checkbox"/> Water                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/> Wastewater treatment / Reuse    |                                                       |                               |                                                 |                                                     |                                                          |                                                 |  |
| <input type="checkbox"/> CETP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> Urban mobility/parking          |                                                       |                               |                                                 |                                                     |                                                          |                                                 |  |
| <input type="checkbox"/> Flood Management /Drainage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <input type="checkbox"/> IT, command and control centers |                                                       |                               |                                                 |                                                     |                                                          |                                                 |  |
| <input type="checkbox"/> Solid Waste Management                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                          |                                                       |                               |                                                 |                                                     |                                                          |                                                 |  |
| <b>Number of HAM and/or PPP contracts (&gt; ₹50 Cr.) executed in the last 10 years:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                          |                                                       |                               |                                                 |                                                     |                                                          |                                                 |  |

## Questionnaire

***Please choose your preferred response(s) from the options provided below. If applicable, you may select more than one option.***

### **Q1. Contract Packaging Approach Preference/s**

- ☐ Consolidated packages grouped by domain (e.g. Water / Wastewater)
- ☐ Packages covering multiple towns/cities
- ☐ High value works bid separately
- ☐ Itemized packages (smaller individual works)
- Preferred contract value per package:  
☐ <₹50 Cr.      ☐ ₹50–100 Cr.      ☐ ₹100–200 Cr      ☐ >₹200 Cr

### **Q2. Mobilization advance (against submission of equivalent bank guarantee)**

- Percentage  
☐ 10% ☐ 15% ☐ 20%    ☐ No mobilization advance required
- Mobilization advance payment on contract signing stage  
☐ 100% upon contract signing  
☐ 50% upon contract signing and rest upon 50% milestone work completion  
☐ No mobilization advance required
- Should the mobilization advance be interest-free?  
☐ Yes      ☐ No

### **Q3. Payment Security**

- Which mechanism should be preferred for payment security?  
☐ Escrow account  
☐ Budget allocation  
☐ Government guarantees  
☐ Others (please specify): \_\_\_\_\_
- Should annuities be indexed to inflation?  
☐ Yes      ☐ No
- What should be expected CAPEX from private entity?  
☐ 40%      ☐ 50%      ☐ 60%  
☐ Flexible, based on project  
☐ Others (please specify): \_\_\_\_\_

#### **Q4. Preferred Contract Tenure and risk**

- Please indicate your preferred contract tenure (construction and O&M period)  
☐ 5–7 years      ☐ 8–10 years      ☐ 11–15 years      ☐ 16 years or more
- Who should bear risks related to land acquisition, force majeure, utility shifting?  
☐ Government/ULB  
☐ Contractor  
☐ Shared responsibility  
☐ Case-by-case basis

#### **Q5. Bid evaluation & Qualification**

- Which evaluation approach is most suitable?  
☐ Merit-point criteria (technical + financial)  
☐ Technical thresholds  
☐ Primarily financial strength and past experience  
☐ Any other approach encouraging wider participation

#### **Q6. Brownfield Project Complexities**

- How should takeover of existing assets be managed?  
☐ Condition assessment and phased replacement  
☐ Fixed % pipe replacement  
☐ Immediate O&M transfer with parallel construction  
☐ Case-specific strategies

#### **Q7. Performance Metrics & KPIs**

- Should outcome be converted into CAPEX KPIs and OPEX KPIs?  
☐ Yes      ☐ No
- Should performance be linked directly to payment?  
☐ Yes      ☐ No
- How confident are you to achieve the KPIs?  
☐ 25%      ☐ 50%      ☐ 75%      ☐ 100%  
☐ Others (please specify): \_\_\_\_\_
- Please provide comment below if project be made 100% performance-based  
(*maximum of 50 words*):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### Q8. O&M Responsibilities

- How should energy bills and consumables be reimbursed?
  - ☐ At actuals
  - ☐ Fixed sums
  - ☐ Through annuity
  - ☐ Employer responsibility only

### Q9. Taking over strategy

- In brown field project what would be your advice?
  - ☐ Employer doing O&M until end of construction period and then hand over.
  - ☐ Contractor taking over from day one, running it and maintain, and paid under the same contract
  - ☐ Contractor taking over from day one, running it and maintain, and paid under a separate supplemental contract on collaborative O&M approach
  - ☐ Others (please specify): \_\_\_\_\_

### Q10. Social & Environmental Safeguards

- What level of responsibility should contractors have?
  - ☐ Full responsibility for land acquisition and clearances
  - ☐ Shared with employer
  - ☐ Limited compliance to statutory requirements only
  - ☐ Case-specific compliance

### Q 11. Main Challenges of HAM and/or PPP

What major challenges do you expect in execution of the HAM/PPP projects?  
(*Maximum of 100 words*)

---

---

---

---

---

Please explain your preference (*Maximum of 100 words*).

---

---

---

---

---

### Background Note

|                                 |                                                                |
|---------------------------------|----------------------------------------------------------------|
| <b>Executing Agency:</b>        | Government of Rajasthan<br>(Local Self Government Department ) |
| <b>Implementing Agency:</b>     | RUDSICO                                                        |
| <b>Project Management Unit:</b> | RUIDP (RUDSICO–EAP)                                            |
| <b>Proposed Funding:</b>        | Asian Development Bank and World Bank                          |

### Purpose of this Note:

To provide a concise overview of the upcoming multi-sector pipeline and the HAM and/or PPP approach, enabling you to provide informed feedback through the attached questionnaire and the Jaipur market survey meeting.

### Scope and Indicative Pipeline:

- (i) **Wastewater** (296 towns|~₹6,662 Cr):  
Sewerage networks, pumping, STPs/DEWATS, reuse mains; tertiary treatment and conveyance for productive reuse; automation/SCADA.
- (ii) **Water Supply** (80 towns | ~₹5,246 Cr):  
24×7 service, DMA-based NRW reduction, metering (AMI/AMR), WTPs/ESRs/pumping, GIS + hydraulic models, SCADA/digital twin.
- (iii) **CETP** (~₹870 Cr):  
New & upgradation in key RIICO/industrial clusters; MBR/AOP/RO, OCEMS, ZLD where mandated, reuse pipelines, sludge/brine management.
- (iv) **Urban Mobility** (7 cities initial | ~₹2022 Cr):  
ITMS/ATCS, NMT & pedestrian works, junction upgrades, smart parking.
- (v) **Flood Management & CCC/Heritage** (56 towns | ~₹500 Cr + ~₹701 Cr):  
Priority drainage, pumps & sensors integrated with ICCC/CCC; heritage and tourism amenities.
- (vi) **Solid Waste Management** (32 towns | ~₹650 Cr):  
Solid Waste Management, Legacy Waste, Transfer Station, Sanitary Land Fill, Decentralized Waste Management- Zero Waste Model

### Contracting Approach under Discussion:

- HAM for large integrated packages in water, wastewater, CETP (design–build + 10–15 yrs O&M). Government grant during construction + availability-linked annuity with KPI deductions.
- PPP/DBFOT for revenue-bearing assets (e.g., parking, select tourism amenities); EPC for small/standalone works.
- Payment security: State budgeted escrow; independent verification (IVA) for KPI/M&V; price indexation framework (to be finalized).

**Risk Allocation (indicative):**

- Govt/ULB: land & right-of-way, statutory clearances, power connections, baseline data access, tariff policy/notifications.
- Concessionaire: design/construction, commissioning, O&M performance, staffing, spares, warranties, ESHS compliance.
- CETP specific: mix of user charges + annuity; influent quantity/quality risk sharing to be defined.

**Key Performance Expectations (illustrative):**

- Water: 24×7 continuity (where applicable), end-user pressure standards, NRW ≤15%, 100% BIS quality, 100% metering.
- Wastewater: coverage expansion, 100% STP compliance, reuse ≥40% by 2031 (phased), OCEMS for large plants.
- CETP: ≥95% OCEMS uptime, ≥95% compliance with SPCB norms, defined reuse volumes; safe sludge/brine handling.
- Mobility/ITMS: ATCS uptime SLA, journey-time reliability; smart parking occupancy & revenue KPIs.
- Flood/CCC: reduction in waterlogging points/duration; pump availability; real-time integration with CCC.

**Digital & Resilience Requirements:**

- GIS single source of truth calculated hydraulic models/digital twin, SCADA/IoT, AMI smart metering, data governance & cybersecurity.
- Climate- and disaster-resilient design; universal access & inclusion (GESI), safeguards (IEE/EMP, GRM).

**Your Feedback (questionnaire prompts):**

1. HAM commercials: Preferred grant–annuity mix; annuity tenor/frequency; indexation; mobilization/retention; payment security (escrow, guarantees).
2. Packaging & size: Single-sector vs multi-sector bundles; optimal capex/O&M sizes; geographic clustering.
3. Risk sharing: Views on demand/revenue risk in water reuse & CETP (influent quality/quantity), utilities interfaces, and relief events.
4. Performance & M&V: Practical KPIs and deduction regime; role/scope of IVA; data & telemetry requirements.
5. Digital stack: Integration effort for GIS–SCADA–AMI–CCC; openness to digital twin deliverables and O&M models.
6. Mobilization & O&M: Realistic timelines, local supply chain/skills, OEM obligations, spares, warranties.
7. Urban mobility/parking: Appetite for revenue risk (parking/advertising) vs. availability payments.

**Proposed Geographic Grouping for Tranche 1 (illustrative, for packaging/  
market sounding):**

- **Circle 1** — North & West Rajasthan - Highly urbanized: Bikaner; Jodhpur; Sikar; Jhunjhunu; Ganganagar; Churu; Pali
- **Circle 2** — Central Rajasthan - Highly urbanized: Ajmer; Jaipur; Tonk  
Satellite towns: Malpura, Duda; Sri Madhopur; Khatushyam Ji; Ajeetgarh; Kuchaman
- **Circle 3** — South & South-East Rajasthan - Highly urbanized: Kota; Udaipur; Bharatpur; Banswara  
Satellite towns: Sangod; Ramganjmandi; Nadbai

*Note: Lists are indicative; final packaging will be refined post market sounding/DPRs.*

## Acronyms:

- AMR – Automated Meter Reading
- AMI – Advanced Metering Infrastructure
- ATCS – Adaptive Traffic Control System
- BIS – Bureau of Indian Standards
- CAPEX – Capital Expenditure
- C&D – Construction and Demolition (waste/material)
- CCC – Command and Control Centre
- CETP – Common Effluent Treatment Plant
- DBFOT – Design–Build–Finance–Operate–Transfer
- DEWATS – Decentralised Wastewater Treatment System
- DPR – Detailed Project Report
- DMA – District Metered Area
- EAP – Externally Aided Projects
- ESR – Elevated Service Reservoir
- GESI – Gender Equality and Social Inclusion
- GIS – Geographic Information System
- GoR – Government of Rajasthan
- ICCC – Integrated Command and Control Centre
- IEE – Initial Environmental Examination
- IoT – Internet of Things
- IP (context: “price indexation framework”) – Indexation/Inflation Protection (use “price indexation”)
- ITMS – Intelligent Traffic Management System
- IVA – Independent Verification Agency
- JV – Joint Venture
- KPI(s) – Key Performance Indicator(s)
- LAR – Land Acquisition and Resettlement
- LSGD – Local Self Government Department
- M&V – Measurement and Verification
- MBR – Membrane Bioreactor
- NMT – Non-Motorized Transport
- NRW – Non-Revenue Water
- OCEMS – Online Continuous Effluent Monitoring System
- OEM – Original Equipment Manufacturer
- OPEX – Operating Expenditure
- PD/PIU/PMU – Project Director / Project Implementation Unit / Project Management Unit
- PPP – Public-Private Partnership
- RIICO – Rajasthan State Industrial Development and Investment Corporation
- RUIDP – Rajasthan Urban Infrastructure Development Project
- RUDSICO – Rajasthan Urban Drinking Water, Sewerage and Infrastructure Corporation
- RUDSICO-EAP – Rajasthan Urban Drinking Water, Sewerage and Infrastructure Corporation – External Aided Projects
- SCADA – Supervisory Control and Data Acquisition
- SLA – Service Level Agreement
- SPV – Special Purpose Vehicle
- STP – Sewage Treatment Plant
- ULB – Urban Local Bodies
- WTP – Water Treatment Plant
- ZLD – Zero Liquid Discharge