DEVELOPMENT OF SEWAGE TREATMENT PLANTS UNDER THE HYBRID ANNUITY PPP MODEL
Why Hybrid Annuity

- Traditional procurement models – EPC or DBOT – do not provide adequate safeguards for sustainable O&M of STPs
- Several models studied to ensure sustainability and accountability
- Hybrid Annuity model most practical for sectors with uncertain revenue stream
- In Jan. 2016, Government approved the Hybrid Annuity model for infrastructure projects under the Namami Gange program
What is Hybrid Annuity

• A procurement model to enhance accountability of the contractor & sustainability of infrastructure

• Different from pure annuity projects where the entire project cost is mobilized by the private company and is paid by the Government over the term of the contract

• To enhance bankability, “hybrid-annuity” projects involve:
  • Construction-linked payments of 40%
  • Balance 60% paid over the term of the contract

• A significant paradigm shift for the sewerage sector
  • 60% of the project cost retained and paid subject to compliance with performance specifications
  • 15 years’ O&M bundled into the contract
  • Incentives built in for performance as well as energy efficiency
Salient Features of the model

- Budget support for payment for project development.
- Participatory approach in development of tender documents. - NMCG has conducted 3 market conferences with bidders and a meeting with lenders.
- Construction cost and O & M cost are index linked to cover inflation risk.
- Payment security mechanism - Payments for two year annuity are placed in a separate escrow account.
- Annuity payment and O & M costs are linked to the achievement of key performance indicators.
- Project supervision by independent Project Engineers appointed by NMCG
- Interest payment risk covered during O & M period.
## Payment Mechanism

### Construction linked payments

Payable by commissioning, as certified by the Jal Nigam, aggregating 40% of the Project Cost quoted by the developer in its Financial Proposal.

### Quarterly Payments – Capex Annuities, O&M Charges and Reimbursements

<table>
<thead>
<tr>
<th>Annuities</th>
<th>Reimbursements</th>
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</thead>
<tbody>
<tr>
<td><strong>Capex Annuity</strong></td>
<td><strong>O&amp;M Charges</strong></td>
</tr>
<tr>
<td>Capex annuity (EMI for balance 60% of the Bid Project Cost) paid out over 60 quarters of O&amp;M Period + Interest on reducing balance of 60% of the Completion Cost</td>
<td>O&amp;M Charge, as quoted by Developer in its Financial Proposal, subject to compliance with specifications &amp; adjusted for penalties. To be adjusted for inflation index</td>
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<tr>
<td><strong>Power Charges</strong></td>
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<tr>
<td>Paid on actuals to the Utility by the Concessionaire and reimbursed by NMCG subject to cap as per power units quoted in bid</td>
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</tbody>
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Project Structure

- **NMCG**
  - Escrow Account
    - Appointed by NMCG

- **JAL NIGAM**
  - Land and ROW
  - Project SPV (Selected Bidder)
    - Design, build, finance, operate, maintain and transfer
    - Sewage Treatment Infrastructure
      - Review and construction supervision, monitoring of KPIs

- **BANKERS /FIIs**
  - Term Loan/ WC
First Two Hybrid Annuity Projects

Varanasi
- Uttar Pradesh Jal Nigam
- 50 MLD STP at Ramana
- Rehabilitation of pumping station, rising main
- Bund, boundary wall & effluent disposal pipeline

Haridwar
- Uttarakhand Pey Jal Nigam
- 68 MLD STP at Jagjeetpur and 14 MLD STP at Sarai
- Site fencing & internal roads
Outcome of the Bid Process

**Varanasi**

8 bids received:
- Adani Enterprises
- Essel Infraprojects
- HNB Engineers
- Metito Utilities
- Panchdeep Constructions
- Suez
- VA Tech Wabag
- Vishvaraj Environment

**Haridwar**

6 bids received:
- Adani Enterprises
- HNB Engineers
- Metito Utilities
- Shapoorji Pallonji
- Suez
- VA Tech Wabag

International Competitive Bid as per best practice
One of the most rapid PPP bid processes in a new sector
Moving Forward

- Based on the successful outcome of the first two bids, NMCG has launched the design of hybrid-annuity projects in several cities:
  - Allahabad- (Jhusi,Naini, Phafamau)
  - Kanpur –(Unnao, Shuklaganj)
  - Kolkata- (Tolly’s nallah,Howarah)
  - Mathura
  - Patna – (Digha , Kankarbagh)

- Further innovations being incorporated:
  - Concept of One-operator-per-city, integrating sustainable maintenance of the existing infrastructure in the contract
  - Proactively promoting effluent recycle and reuse
  - Further strengthening payment security mechanism through credit enhancement
Thank You