

DEVELOPMENT OF SEWAGE TREATMENT PLANTS UNDER THE HYBRID ANNUITY PPP MODEL



NATIONAL MISSION FOR CLEAN GANGA (NMCG)
Ministry of Water Resources, River Development and Ganga Rejuvenation
Government of India

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

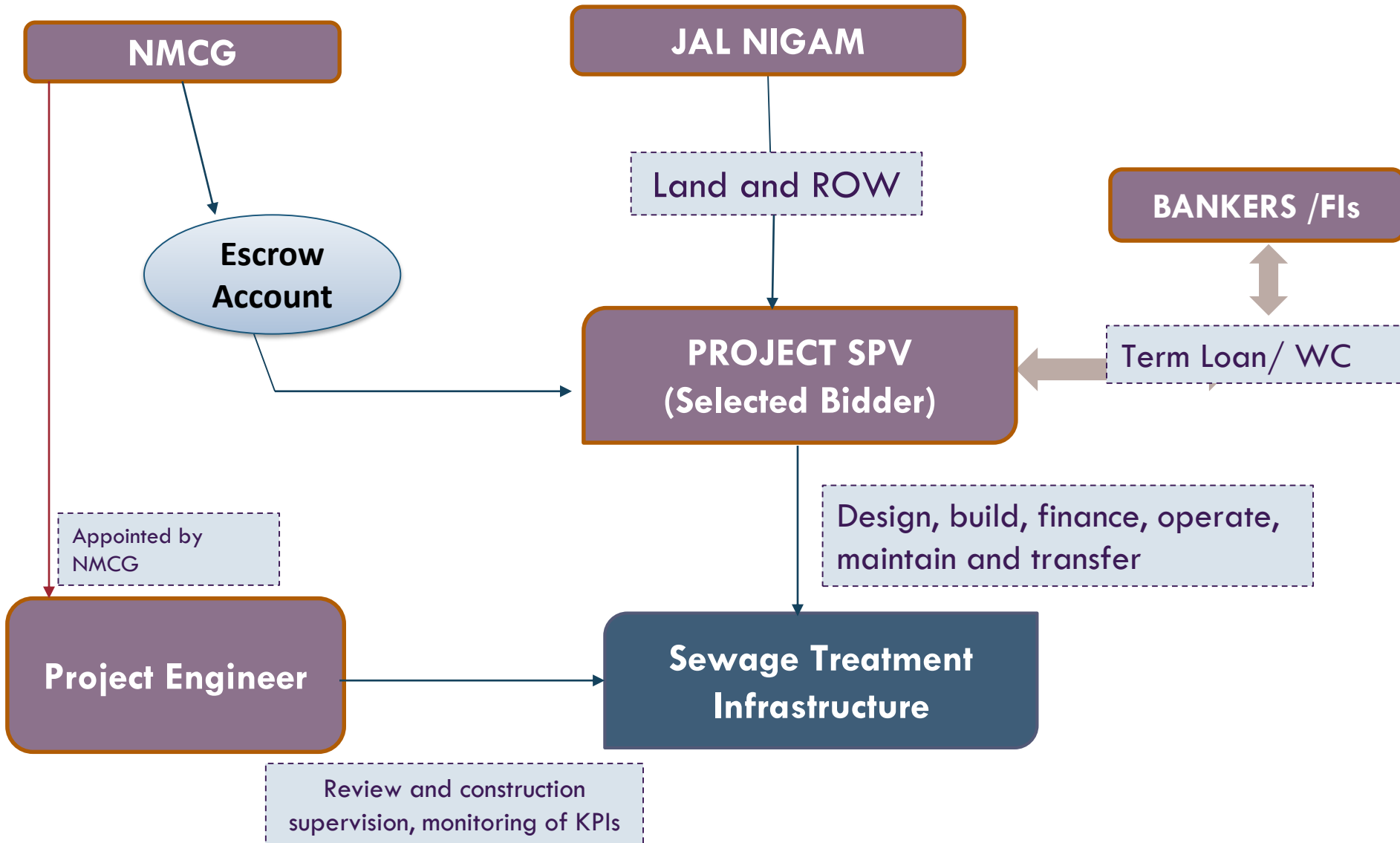
Construction linked payments

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

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

Project Structure



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