Webinar on India: Smart Cities and Urban Infrastructure Opportunities

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SPEAKERS

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Austrade

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WEBINAR:

INDIA: SMART CITIES & URBAN INFRASTRUCTURE OPPORTUNITIES
Urbanization is an unstoppable phenomenon.

The world is rapidly urbanising.

& so is INDIA

The world's population living in cities or urban centres has risen steadily over the years.

- Since 2007: 50%
- By 2030: 60%
- By 2050: 66%

From 2010 to 2050: 2.5 to 3 billion people.
Bird’s Eye: Stellar Urban Growth

Picture released by NASA: India during the Night
As per 2011 census, the urban population of the country is **377.16** million viz. **32.16%** of the total country’s population.

**7935** number of towns present as compared to 5161 in census 2001.

India’s current urban population exceeds the whole population of the United States, the world’s third largest country.

By 2050, over half of India’s population is expected to be urban dwellers.

Among the 37 States/Union Territories in the country, **22 are multi-disaster prone**.

Massive Urbanisation is set to script the **RESILIENT SMART URBAN LIVABLE CITIES in INDIA**.
Urban Infrastructure

- SMART City Mission (INR 48000 Crores/USD 7.3 Bn/AUD 9.2 Bn)
- Affordable Housing (INR 23000 Crores/USD 3.5 Bn/AUD 4.3 Bn)
- AMRUT (INR 23000 Crores/USD 7.6 Bn/AUD 9.6 Bn)

Water & Waste Management

- Namami Gange (INR 20000 Crores/USD 3.07 Bn/AUD 3.85 Bn)
- Interlinking of Rivers (INR 11 Lakh Crore/USD 168 Bn/AUD 210.94 Bn)
- Municipalities/ULB
- Desalination
Urban Mobility

- Metro - Airports
- Low cost Airports for regional connectivity
- Upgradation of Tier II Airports for increased traffic volume
- Investments envisaged INR 2.6 Lakh Crore/ USD 40 Bn/ AUD 50.22 Bn

Ports & Logistics

- SMART Industrial Port City
- Energy Corridors to hinterland
- Sagarmala Investments envisaged INR 10 Lakh Crore/ USD 153 Bn/ AUD 194 Bn
108 CITIES ANNOUNCED FOR TRANSFORMATION, 200 + CITIES IN PIPELINE.

INR 48,000 Cr ++
Total Outlay of the 100 cities of the Smart Cities Project from Central Budget

Area Based Development
- Retrofitting
- Redevelopment
- Green Field development

Pan-city development
- Application of ICT
- Improvement in local governance
- Delivery of public services
91 Cities have incorporated the SPVs for Implementation

69 Cities have appointed PMC

5,500 Town Planners working on SCM

SMART ROADS Project worth INR 51 Billion under various stages of Tendering

SMART Water Projects under Implementation in 43 Cities

PPP Projects worth INR 77 Billion under Implementation

Heritage Conservation Projects, Water Front Development, Public Space Development projects worth INR 58 Billion under Implementation
DEMAND FOR WATER IS EXPECTED TO GROW BY LEAPS & BOUNDS

India Water Demand by Sector
Billion Cubic Meters

2010  2020  2030
Domestic  8%  832
Industrial  11%  66
Agriculture  81%  92

Rising Population/Urbanization
Industrialization
Smart Cities
DMIC & Other Corridors
Special Economic Zones/PCPIRs
Desalination

Investment: USD 80 Billion / INR 5.2 Lac Cr/ AUD 100.45 Bn
India plans to increase the number of airports to 250 by 2030.

- **13 Regional Airports** proposed
- **17 Low Cost no frill Airport** proposed

Investment: USD 40 Bn / INR 2.6 Lac Cr / AUD 50.2 Bn
Sagar Mala project is a strategic and customer-oriented initiative of the GoI to modernize India's Ports. Contribute to India's growth through port-led Industrialisation and Coastal development.

**Investment:** USD 120 Bn/ INR 7.98 Lac Cr/AUD 150.67 Bn
To benefit 10 million youth

Budget: USD 18.7 Bn / INR 12000 Cr / AUD 23.56 Bn
**AUSTRADE**

- The Australian Trade Commission contributes to Australia’s economic prosperity by facilitating support to
  - Australian businesses
  - Education institutions
  - Australian Manufacturers
  - Australian Government

For successful business in India

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**ENGINEERS INDIA LIMITED (A Govt of India U/T)**

- S.E.Asia’s Largest Engineering Consultancy Organisation, A Navratna & CPSE, “GOI”
- Empanelled with Ministry of Urban Development, Govt. of India
- Largest Engineering Pool comprising of a Engineering Disciplines under One Roof.
Collaborative approach with Austrade

1. Master Planning and Urban Design
2. Consultancy Solution Providers
3. Utilities Solutions for Water and Waste Water Technologies
4. Smart Grid, Energy Storage, Smart Meters Technology
5. Data Management and GIS

EIL

Australian Firms

Approach State Govt Officials, Chief Secy, other Clients

Approach Clients for Select Projects

Presentation on how EIL-Austrade partnership can value add to Projects

YES

NO

BID for Projects along with Australian Companies

Formulate a Team to Execute the Projects

Show Case Strength and create Bench Mark Projects

Australian Firms/EIL to initiate preparation of Suo Motu Reports for the ULB’s and Prospective Clientele.
“NAVRATNA” CPSE, Largest Engineering Consulting Organization in S E Asia

Over FIVE decades of impeccable credentials Creating Landmark projects to shape the Hydrocarbon Infrastructure in India

Resource base of 3,000 highly experienced professionals in all major Engineering Disciplines

40 Major Infrastructure Projects, Yamuna Interceptor Sewer project reckoned amongst the Top 100 Projects of the world in year 2015

Multi Disciplinary Expertise delivering “Concept to Commissioning” of Large & Complex Multi Sectoral Projects.

Presence in MENA, SE Asia & SAARC Countries
### Key Strengths

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<th>Category</th>
<th>Details</th>
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<td>Five Decades of Project Execution Experience</td>
<td>More than 5000 assignments including over 400 major projects worth USD 200 Billion in total cost.</td>
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<td>Concept to Commissioning Capabilities</td>
<td>Feasibility, Licensing, FEED, PMC and EPC services,</td>
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<td>Post Commissioning &amp; Specialized services</td>
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<td>Familiarization with Licensed Technologies</td>
<td>Worked with most of the Licensors in world across wide spectrum of technologies in O&amp;G, Refining, Petchem, Fertilizers, Non Ferrous, Water</td>
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<td>Vast In-house Data Bank</td>
<td>Knowledge archives of Past Projects, Vendor, Contractor and Cost information</td>
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<td>Value Engineering</td>
<td>Strong Design capabilities, Exposure to alternative technologies,</td>
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<td>Extensive data bank, vast experience in green fields &amp; revamps</td>
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<td>Feedback from operating plants.</td>
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<td>Comprehensive Service Capability</td>
<td>Multi-disciplinary expertise under one roof.</td>
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Understanding client’s needs, manage midcourse changes, provide cost effective solutions and Suo-Moto Value additions opportunity identification and execution for clients.
Independent Engineers for Ultra Modern Airports
New Delhi & Mumbai

Interceptor Sewage System for Yamuna River
Project of Delhi of DJB

Largest Heritage Restoration Project: Connaught Place, New Delhi

Rajiv Gandhi Institute of Petroleum Technology,
Rae Bareli, UP
Thank You

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Smart City Mission in India

July 2018
**Smart City Mission**

100 cities (over next five years i.e. 2016-2021)

- **Area-based development:**
  - Retrofitting
  - Redevelopment
  - Greenfield development
- **Pan city solutions**

- **Central government** - INR 50,000 crore over five years
  - 1st year - INR 200 crore
  - 2nd Year - INR 100 crore
  - 3rd Year - INR 100 crore
  - 4th Year - INR 100 crore

- Develop a smaller area as pilot project and replicate the model for rest of the city based on learnings
Sectors

- Adequate water supply
- Assured electric Supply
- Sanitation including solid Waste management
- Urban mobility & Public transport
- Affordable Housing
- IT connectivity and digitization
- E-Governance and city participation
- Sustainable Environment
- Safety & Security
- Health & Education

Core Infrastructure Elements
Distribution of shortlisted 100 cities

- Tamil Nadu, Uttar Pradesh: 10
- Karnataka, Maharashtra: 8
- Madhya Pradesh: 7
- Gujarat: 6
- Andhra Pradesh, Bihar and Rajasthan: 4
- Chhattisgarh, Punjab: 3
- Arunchal Pradesh, Haryana, Himachal Pradesh, J&K, Kerala, Sikkim, Telangana, Odisha: 2
- Other states and Uts: 1
Sources of Funding and Breakup for 100 cities – 41 Bn AUD

- Central Govt: 23%
- State Govt: 22%
- Convergence: 21%
- PPP: 21%
- Loans: 4%
- Own Sources: 1%
- Others: 8%

Pan City, 19%

Area Based Development, 81%
Sectoral Break-up of Smart City Projects – 90 Cities (40 Bn AUD)

- **Area and Economic Development**: 27%
- **Transport and Mobility**: 15%
- **Smart Solutions**: 13%
- **Energy & Environment**: 11%
- **Housing**: 7%
- **Solid Waste Management**: 7%
- **Water Supply**: 6%
- **Sewage**: 5%
- **Social Sector (Health, Education, etc)**: 3%

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Cities under Round 1
Cities under Fast Track Round
Cities under Round 2
Cities under Round 3
Cities under Round 4

- Bareilly
- Bihar Sharif
- Moradabad
- Saharanpur
- Silvassa
- Diu
- Kavaratti
- Erode
- Itanagar
Process flow of smart cities mission

1. Central Government
   - Call for Smart City Nominations
     - Identifying & Nominating Cities
       - State Task Teams
         - State Task Teams coordinating with & guiding ULBs
2. State Government
   - Submit SCPs
     - Selection of Cities
       - Disbursal of funds along with state share
3. ULB
   - Appointment of Consultants for preparation of SCP
     - Allocation of funds for projects
       - Setting up SPV and appointing PMC
     - SPV to oversee work of PMC and project implementation
   - M&E of Progress