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Intercontinental Consultants and Technocrats Pvt. Ltd.



ARKITECHNO CONSULTANTS (INDIA) PVT. LTD.











Project Background

- The Government of Odisha (GOO) has developed an Institutional Strengthening Action Plan (ISAP) for 2008–2018
- Major objective of ISAP was to initiate restructuring and strengthening of institutions involved in road development and management.
- ISAP has identified several key result areas to be addressed within a short term (2 years) to a medium term (2–5 years) horizon.
- As a follow up action, ISAP 2008–18 has been endorsed by the State Government for implementation by the GOO with a provisions to facilitate monitoring of ISAP results by the GOO and the World Bank.
- 2012: To assist in the realization of ISAP objectives, OWD has engaged the services of Intercontinental Consultants and Technocrats Pvt. Ltd (ICTPL), New Delhi having a joint venture with Grant Thornton Advisory Pvt. Ltd. (GT-APL), UK and association with ARKITECHNO Consultants (India) Pvt. Ltd. Bhubaneswar. Duration of consultancy is 30 months w.e.f. April 2012.



Road Sector Institutional Development, Odisha



Project - Objectives of Consultancy

- The development objective of the consultancy services is the Road Sector Institutional Development (RSID)
- The specific objectives of the RSID consultancy assignment are:
 - To enhance the capacity of the OWD and where appropriate, other GOO road sector agencies concerned to carry out road infrastructure development
 - To improve the engineering aspects and planning for road safety management in the State and
 - To initiate mechanism for sustainable future growth with the resources dedicated to roads infrastructure development.



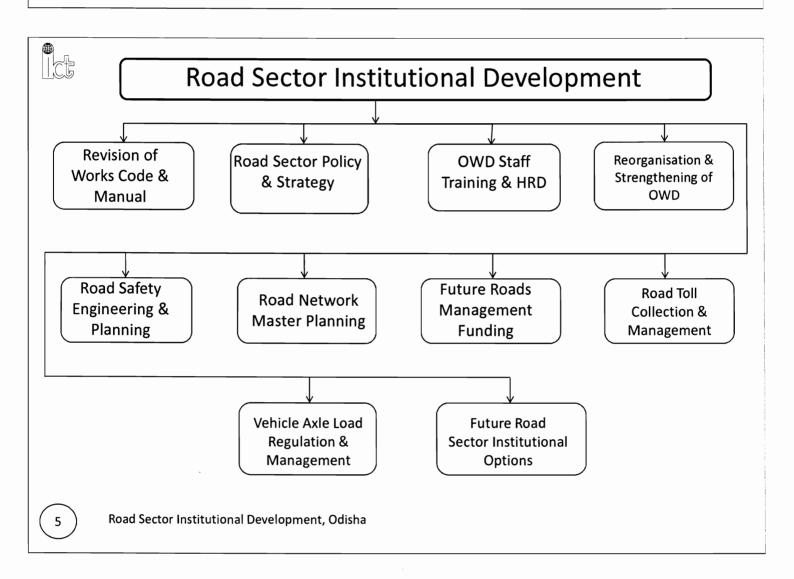
Scope of Consultancy Services

Scope of services include:

 Policy and institutional interventions in the roads sector, in accordance with the ISAP involving diverse forms of technical assistance, training and capacity building services, policy studies and implementation support (including legal and statutory aspects).

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Road Sector Institutional Development, Odisha





Overview of the Deliverables

Project Deliverables:

General Deliverables

- The Inception Report Approved
- Quarterly Progress Reports 1 to 4 Approved
- Mid-Term Status Report and QPR 5 Submitted on due dates, under approval

Task-wise Deliverables

Report on Road Infrastructure Safety Management Review –
Approved

Deliverables to continue...



Road Sector Institutional Development, Odisha



Overview of the Deliverables (Contd.)

• Task wise Deliverables - Under Approval

- 1. Working paper on Organizational Restructuring May 2013
- 2. Draft report on Odisha Road Sector Policy and Requirements for its Implementation June 2013
- Interim Report on Revision of OPWD Code & Manual June 2013 including SBDs
- 4. OWD HRD Policy (June 2013) and Report on Training Needs Assessment (TNA) Results July 2013
- 5. Draft Report on Odisha Road Safety Action Plan Aug 2013
- 6. Report on Vehicle Axle Load Regulation and Management Aug 2013



Overview of the Project Progress

Project Activities

- First Workshop for stakeholders was conducted successfully during the month of November 2012
- Focussed Group Discussions to identify Organizational Issues needing improvements
- Brain-Storming sessions (focussed Group Discussions) to define and delineate OWD Functions and Framework of a Structure
- Development of RACI matrix of various positions in OWD
- Competency Survey
- Study Visit of GOO officials to other states i.e. Gujarat and Madhya Pradesh (July 22 - July 29, 2013)
- Face to Face interactions with GOO and OWD officials
- Task wise Review meetings (specially OPWD code, SBDs)
- Data collection
- ISAP Review Committee Meetings

Road Sector Institutional Development, Odisha





TASK I: REVISION OF OPWD CODE AND MANUAL

Broad Format and Status of Revision of OPWD Code & Preparation of OPWD Manual

Mr. A.K. Sinha



Structure & Contents of Existing OPWD Code

No. of Volumes -2**Volume I contains 6 Chapters Volumes II contains 34 Appendices**

- Chapter 1: Introduction, Chapter 2: Establishment,
- Chapter 3: Works, Chapter 4: Public Buildings,
- Chapter 5: Miscellaneous Rules, Chapter 6: Powers of Sanction of Govt and PW officers.
- Appendices I to XXXIV are in the form of Guidelines, Rules, Procedures, Executive Instructions, Principles, Yard sticks, Contractors' enlistment, blacklisting etc.



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Revised OPWD Code

Single Volume containing following 12 Chapters:

- Chapter 1: Introduction, Chapter 2: Organisation & Establishment
- Chapter 3: Works, Chapter 4: Public Buildings
- Chapter 5: Miscellaneous, Chapter 6: Budget, Accounts Procedure & **Audit**
- Chapter 7: Safety Management, Environment safeguard and Social Impact Management.
- Chapter 8: Asset Management, Chapter 9: Quality Management
- Chapter 10: Dispute redressal, Arbitration and RTI
- Chapter 11: PPP, Chapter 12: IT & MIS



OPWD Manual

Single Volume containing following 13 Chapters:

- Chapter 1: Introduction
- Chapter 2: Organisation & Establishment
- Chapter 3: Works
- Chapter 4: Public Buildings
- Chapter 5: Miscellaneous
- Chapter 6: Budget, Accounts Procedure & Audit
- Chapter 7: Safety Management, Environment Safeguards and Social Impact Management
- Chapter 8: Asset Management
- Chapter 9: Quality Management
- Chapter 10: Dispute redressal, Arbitration and RTI
- Chapter 11: PPP
- Chapter 12: IT & MIS
- Chapter 13: Delegation of Power
- Appendices: 20 Nos.

Road Sector Institutional Development, Odisha



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Standard Bidding Documents (SBDs) & Procurement Manual

- SBD for Works above 10 lacs
- SBD for Works up to 10 lacs
- SBD for Services
- Procurement Manual for Goods
- Procurement Manual for Works & Services



Status of Revised OPWD Code

- All 12 Chapters with comparative statement of Existing provisions, Suggested changes with justification for changes made and references have been submitted during May-June 2013. These were based on preliminary comments of "Codes and Manual Revision Committee" headed by the Chief Engineer (Design)
- Review of Chapter 1, 2 & 3 completed
- Review of Chapter 4: Public Buildings is in progress



Road Sector Institutional Development, Odisha



Status of Preparation of OPWD Manual

- Draft of all the 13 Chapters ready
- Chapter 1 to Chapter 6 are being finalised and likely to be submitted by 19th August, 2013
- Chapter nos. 7 to 13 are likely to be submitted subsequently - by last week of August 2013
- All Appendices are being drafted simultaneously likely to be submitted during September, 2013



Status of SBDs and Procurement Manual

- SBD for works above 10 lacs: Submitted & discussed/ finalised by a committee of all CEs
- SBD for works up to 10 lacs submitted
- SBD for Procurement of Goods resubmitted after discussions
- Draft Procurement Manual for Goods: ready and shall be submitted shortly
- Draft Procurement Manual for Works: to be submitted by Sep, 2013



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Conclusions (Task I)

- The task/subject is such that feedback and suggestions from OPWD officers for improvements are necessary for its finalisation
- Review by the committee headed by Chief Engineer (Design) needs to be supported well by participation of OPWD officers with aptitude, willingness and time.
- Time bound program for completion of review process is necessary to complete the task early



OWD Staff Training and HRD

> Scope of work/Deliverables

- Prepare OWD HRD policy Facilitate establishment of HRD system/
 Training functions capacity within OWD;
- Conduct 'Training Needs Assessment' (TNA) exercise Identify/define integrated set of 'core technical and management skills + knowledge' for OWD technical staff;
- Developing multi-year 'rolling' Staff Training program; and
- Evolving an evaluation system to manage training quality.

Objectives

- Sustainable and effective OWD capability and performance
- Institutionalise HRD function as per OWD HRD Policy
- Improve training delivery and quality

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Road Sector Institutional Development, Odisha



OWD Staff Training and HRD (Contd.)

- > Utilising 'process approach', focus has been and will be on following key activities:
 - i. Organizational Review
 - ii. Develop 'OWD HRD Policy'
 - iii. Conduct 'Training Needs Analyses' TNA
 - iv. Prepare comprehensive Training plan
 - v. Evolve an 'evaluation system' to monitor Training Delivery
 - vi. Training Information Management System (TIMS)
- > Three-way **methodology** followed:
 - One-to-one interviews,
 - Focused Group Discussions (FGDs) and
 - Development, testing, administration of Questionnaires and analysis.





> OD review

- very high desire and equally high level of expectation from HR
- past efforts brought out significant pessimism w. r. t. training
- effort towards 'Training development' within OWD needs a lot of improvement

> Organizational issues

- Cultural issues
- Policy & Strategies issues
- Structural issues
- Resource issues
- Process & System issues
- HRM issues



Road Sector Institutional Development, Odisha



OWD Staff Training and HRD (Contd.)

- > RACI [Responsible, Accountable, Consult, Inform] matrix for task analysis.
- > Salient observations emerging out of analysis
 - Overlap of responsibilities
 - Unassigned functions/ tasks
 - SE's have limited functions
 - JE's overloaded
 - Awareness about respective delegated responsibilities is lacking
 - Functional area such as Project Management, Quality, Safety,
 Environment & Social, Human Resource Management etc. are areas of concern <u>requiring urgent management interventions</u>



> Present training system in OWD

LAST 5 Years: Staff trained 12 % (avg.); Rs. 77 Lacks spent

> Major weaknesses:

- No OWD HRD/training policy
- Training currently ad-hoc, Absence of Training Needs Assessment
- Training efforts are reactive, 'supply' driven, Lack of proper selection of type of training courses (Demand-based)
- Absence of proper system of selection of participants
- Inadequate/Inappropriate training provider selection
- Lack of feed back or evaluation, No analysis on the training attended, no training learning disseminated
- No training records maintained

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Road Sector Institutional Development, Odisha



OWD Staff Training and HRD (Contd.)

Deliverable 1: OWD Human Resource Development Policy
 (Concept + Strategies + Implementation)(Document submitted June 07)

'HRD & Training cell' with primary mandate to manage and monitor the 'HRD Policy', as well as to execute the HRD strategies and processes therein i.e.

- Communications Strategy: essential to educate and train OWD staff about every 'change' through systematic communication strategy.
- Quality Strategy: Quality needs to be fostered in OWD staff through strategic development to bring in Total Quality Management.
- Entrepreneurship Strategy: Every employee an independent entrepreneur, who can generate ideas and bring them to reality by using existing resources
- Culture Building strategy: Organization's valuing its employees who are highly charged, motivated and committed.
- Accountability And Ownership Strategy: Employee's accountability and ownership leads to higher productivity.
- Learning Strategy: Continuous development and learning environments promote self development of employees, of self and by self.
- Systematic Training Strategy: Planning of formal on-job training and off-job training.



Deliverable 2: ASSESSMENT OF TRAINING NEEDS (TNA) (Report submitted July 18, 2013)

Activities taken up include

- One-to-one interviews: consultation with OWD officials on aspirations deficiencies, gaps in capabilities. (7CE's, 6 SE's, 10 EE's)
- Focused Group Discussions: for validation of the data (8 sessions at HO, Puri, Sambalpur, Brahmapur - 15 EE's, 55 AE's, 60 JE's)
- Competency Survey: Using a structured questionnaire developed, tested, circulated, and responses collected (2CE's, 2 SE's, 19 EE's, 32 AE's, 65 JE's)
- Analyzing the responses to determine specific training needs of each target group



Road Sector Institutional Development, Odisha



OWD Staff Training and HRD (Contd.)

> 'TNA' Analysis

- Competency Survey Conducted to contribute towards <u>assessing and</u> <u>prioritizing the training needs</u>
- Competency Scores arrived at based on self assessment by individual respondents (based on objective and honest assessment by each respondent)
- Prioritized the training needs for each level, based on two aspects-
 - present level of competency in each functional area /task, and
 - likelihood of the personnel being required to perform the function/task in the future.



> ASSESSMENT OF TRAINING NEEDS (TNA)

Four step process

Step 1 Response Assimilation

Step 2 Prioritization based on competency score

Step 3Prioritization based on possibility of working in future

Step 4Overall prioritization

Outcome of TNA

Based on One-to-one interviews, analysis of Competency Survey, Focused Group Discussions and assessment by line managers

Priority-A Essential short-term (within one year)

Priority-B Essential long-term (within two years)

Priority-C Desirable short-term (within three years)

Priority-D Non - essential

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Road Sector Institutional Development, Odisha



OWD Staff Training and HRD

> Way Forward

- Facilitate "OWD Human Resource Development Policy"
- Organizational "RE" Structuring 'HRD & Training cell'
- Training Plan Translating TNA into Training Courses along with Training Delivery Strategies (Deliverable 3)
- Development of training 'evaluation system' (Deliverable 4)
- Development of Training database
- Facilitate establishment of Documentation Center, Library



Road Sector Policy and Strategy

- ➤ Draft Report on Odisha Road Sector Policy and Requirements for its Implementation has been submitted in June 2013. Comments/Approval awaited
- ➤ It includes Situational Analysis of Odisha (socio-economic, modes, road network, accidents, present guidelines/rules, institutional mechanism etc.): Review of Policies of other states and develops VISION, necessity, justification and objectives
- ➤ Proposed Policy focuses on improvements in Planning, Design, Road Administration, Procurement, Construction, Maintenance, Social and Environmental Management, Finance and Financial Management (Includes PPP), Institutional, Contract Management, Road Safety, Quality Management, Technology, Monitoring and Regulation



Road Sector Institutional Development, Odisha



Re-organisation and Strengthening of OWD

- > Situational analysis and SWOT analysis of OWD and of the change drivers have been undertaken and validated
- > Interviews with Senior/Middle level OWD Officials have been undertaken.
- Brainstorming sessions have been undertaken on Structure
- > Submitted Working Paper on Organisational Restructuring during March 2013
- > Discussions with Senior OWD officials to finalize Vision and Mission are underway (workshop has been proposed)
- ➤ Discussions with Senior officials on Functional Specialization (Roads, Buildings etc.) are underway
- > Development of Institutional Set up (RDC, SRF etc.) is under progress



Road Safety Engineering and Planning

- > Report on Road Safety Infrastructure Management Review has been submitted in April 2013, which has been approved
- ➤ Data collection from concerned departments of GOO has been undertaken in addition to collection of data from few selected states to assess the capacity (and constraints) of these departments to address the identified key road safety issues
- Submitted an 'Approach Paper for High Level Workshop' in June 2013 for circulation to The World Bank and other key stakeholders, followed by Draft Report on proposed Road Safety Action Plan in Aug 2013



Road Sector Institutional Development, Odisha



Road Network Master Planning

- > Traffic Count Surveys completed on all the 194 locations
- ➤ Roughness Surveys has been completed in 186 road links out of 191 links (3,030 km out of 3,129 km)
- ➤ Road Inventory Survey has been completed in 186 road links out of 191 links (2,960 km out of 3,129 km)
- ➤ Benkelman Beam Deflection Tests (BBDT) has been carried out in 146 road links out of 191 links (2,260 km out of 3,129 km)
- > Dynamic Cone Penetration (DCP) Test has been carried out in 146 road links out 191 road links (2,260 km out of 3,129 km)

Contd./-



Road Network Master Planning

- > Following mapping activities under GIS environment were undertaken:
 - Coding of all 314 blocks based on population density
 - Plotting of all 314 block headquarters, 132 major towns/cities, market centres and tourism centres
 - Identification of villages having only Kaccha roads
- ➤ Block level maps for 6 districts have been developed for marking ownerships of all rural roads by *Panchayat Raj* Department
- ➤ Carry out missing links analysis to backward and tribal areas and Develop an Area Growth Potential Index (AGPI) at the block HQ level is under progress
- > Reclassification of road network based on IRC guidelines and travel demand is under progress
- > Traffic Modeling of main road network is in progress



Road Sector Institutional Development, Odisha



Future Roads Management Funding

- > Detailing the As-Is Situation and requirements for additional sources of funds is in progress
- > Review and analysis of other sources of funding of road sector (Dedicated Road fund, PPP etc.) and their pros and cons from other states has been completed.
- > Intensive discussions with OWD/GOO officials have been undertaken.
- > Structuring of road fund is being done.
- > Report is planned to be submitted soon.
- Activity is planned to be completed by end of September 2013



Road Toll Collection and Management (Activities in progress)

- Study and Review of Current Tolling System in the State and Revenue Collected from various Toll Booths has been undertaken
- Consultation with OWD
- Study of Tolling Policy, Practices and Mechanism in Other States
- Working out Options on Tollable and Non-Tollable Roads
- > Development of Draft Guidelines to facilitate Toll Setting, Operation and Collection of Toll Revenue on Outsourced basis
- Preparation of Model Tolling Contracts and Implementation Plan
- > Submission of Structure of Report on Management of Out-sourced Road Toll Collection and Maintenance/Operations in July 2013
- Preparation of Report on Management of Out-sourced Road Toll Collection & Maintenance/Operation is in progress
- > Activity is planned to be completed by mid-September 2013



Road Sector Institutional Development, Odisha



Vehicle Axle Load Regulation and Management

After undertaking the following:

- Axle Load Survey on all the identified locations (50 nos.)
- Computerisation and analysis of collected data/information
- > Development of Regulatory and other Control Measures bases on inferences drawn from the data analysis and based on experiences elsewhere

Report on Vehicle Axle Load Regulation & Management has been submitted in August 2013



Future Road Sector Institutional Options

- Undertaken review and analysis of
 - institutional mechanism in other states,
 - evolution of road administration in some selected countries
- > Developed the responsibility matrix of various road sector entities/stakeholders in the state of Odisha
- Simultaneously undertaking
 - Gap analysis in present system
 - Options analysis (Pros and Cons) on possibilities of SRC, SRF, Highways authority etc.
- > Results to be presented to OWD through a workshop (after Vision Workshop)



Road Sector Institutional Development, Odisha



Immediate Interventions Needed

- Accelerated Review and Approval of Submitted Chapters of OPWD Code, SBDs (OPWD manual follows)
- Finalization of dates of
 - > Road Sector Vision, Mission Workshop (along with discussions on OWD vision, mission, structure)
 - > High level Workshop on Road Safety Action Plan
- Approval of submitted Deliverables and Payments thereof



Deliverables Planned in next 3 months

- Draft OPWD Manual Sept 2013
- Report on Management of out-sourced Toll Collection Sept 2013
- Report on Training Plan (based on Training Needs Assessment) Sept 2013
- Report on Future Road Sector Funding Mechanism Sept 2013
- Finalized Deliverables (The earlier submitted reports, which have been commented and discussed)



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Thank you!