GOVERNMENT OF GUJARAT ROADS & BUILDINGS DEPARTMENT [R&BD]

CONSULTANCY SERVICES REQUIREMENT

Road Sector Knowledge & Capacity Development: Centers of Excellence, Workshops & Advanced Seminars

TERMS OF REFERENCE

Background

- 1. The state Government of Gujarat (GOG) through the Government of India (GOI) is seeking funding assistance from the World Bank (WB) for implementation of the new Second Gujarat State Roads Project (GSHP-II), to be managed primarily by the GOG Roads & Buildings Department (R&BD). It is intended that a portion of this WB funding will be used to finance consultancy, advisory and technical services required for implementation of various important activities during the Project which are aimed at further developing and strengthening the road sector institutional and policy framework and capacities to meet the growing challenges in the sector through the state's economic development and increasing demand for road transport infrastructure quality, capacity and connectivity.
- 2. The groundwork for policy reform and institutional strengthening in the state's roads sector was put in place over 1999-2007 under the first GSHP, also implemented with World Bank assistance. The new GSHP-II will enable the GOG to build on that via its Sector Policy & Institutional Development Component, comprising a range of 'second-stage' roads sector institutional and capacity-development initiatives combined in a new GOG-endorsed Institutional Development Action Plan (IDAP) covering the period 2013 2019.
- 3. The 2013 2019 IDAP will be an integral part of the overall Project strategy and shares linkages with and will be implemented in parallel with a new sector-level multi-year Governance & Accountability Action Plan (GAAP). The IDAP in 'summary matrix' format will be used between the GOG, the R&BD and the World Bank to guide and monitor the IDAP implementation process and its results relative to a range of clear monitorable targets and milestones in three major fields, viz.
 - > Road Sector Policy & Planning (roads policy/strategy/planning, safety, governance)
 - ➤ **R&BD centered Capacity Development** (rules, standards, business processes, operations equipment & technology, Information Technology & MIS, staff HRD)
 - ➤ Road Sector Knowledge & Capacity Development (enhancing sector entities, new centers of excellence, collaborative sector knowledge/skills advancement programs)

The IDAP summary matrix is included in these Terms of Reference (TOR) as Appendix 2.

- **4.** The GSHP-II funding will support a wide range of external assistance in the form of consultancy services, technical expertise, acquisition of advanced / specialist equipment including IT hardware and software, and other miscellaneous services, materials and/or consumables needed to undertake the IDAP implementation program.
- 5. In this particular instance, it has been decided that the R&BD shall engage consulting services to help it to prepare and implement a range of *Sector Knowledge & Capacity Development* initiatives, from the planning and design stages through (after any necessary R&BD and/or GOG decision-making) to initial operational support. The overall assignment, its specific elements and the actions and deliverables expected from the selected Consultant in the services are the subject of these **Terms of Reference** (TOR), as detailed below.

Objective & Scope of the Services

- **6.** The overall objective of these **Sector Knowledge & Capacity Development** services is to assist the R&BD in implementing specific new programs, collaboratively with other Gujarat roads sector stakeholders and technical institutes, aimed at achieving sector-wide advances in concepts, knowledge and applied science in road infrastructure planning, design, management and governance, in accordance with the R&BD-centered IDAP.
- 7. The assignment will comprise two 'study-based' Tasks as outlined below.
 - Study for collaborative initiation between R&BD and leading Gujarat technical and
 professional institutes of a 'pilot' program of Seminars and Workshops on technical,
 management and governance topics, featuring international-standard sector experts.
 - Study for identification, feasibility, design, operations and governance of two possible R&BD-linked *Centers of Excellence* for the roads sector in Gujarat, which would individually and/or jointly address sector 'thrust areas' such as the following.
 - * Road & Bridge Design & Innovation, and
 - **Construction Management** (potentially termed an **Academy**)
- 8. Each of these two major Tasks is expected to require (i) an initial Study (of varying length, complexity and/or methodology) to determine the design and feasibility requirements of the respective initiative(s); (ii) preparation of Study-based submissions and documentation as required for R&BD and/or GOG-level decision-making on Study recommendations; and (iii) in the event of affirmative R&BD or GOG decisions upon the recommendations, facilitation of initial post-Study implementation action as determined by the Client.

Specific Tasks Comprising this Assignment

- **9.** The specific Tasks to be carried out by the Consultant under these services are as follows.
- Task 1. Study of Proposed 'Advanced Seminars & Workshops Program': Undertake a Study to determine the feasibility and to define the concept, aims, contents, delivery mode(s) and management framework for a new 'knowledge transfer' Program of advanced Seminars and Workshops on contemporary roads sector topics and issues, delivered collaboratively between leading technical, professional and industry entities in Gujarat and the R&BD, funded mainly by the GSHP-II for an 18-months 'pilot' period. This shall involve:
 - (a) Identifying the <u>range of subjects / fields in sector knowledge, technology and capabilities</u> involved in the challenges facing India in road infrastructure development, financing, provision and management, in consultation with the R&BD, the GIDB* and representatives of industry and concerned institutions in the sector;
 - (b) Preparing a 'shortlisting' of key subject areas / topics in which the R&BD and other major roads sector stakeholders would most benefit from access to more advanced international knowledge, approaches, perspectives, experience and technology, not otherwise covered in Gujarat via existing training, educational and/or professional development programs;
 - (c) Developing and (after R&BD agreement) initiating an appropriate process to identify <u>and confirm the interest of</u> a range of internationally-experienced technical / professional experts in the 'shortlisted' fields, for possible empanelment as sessional presenters / resource persons offering current 'leading edge' expertise and global 'best practice' knowledge in such fields;
 - (d) Consulting relevant leading Gujarat technical and professional institutes to <u>assess their capacity and confirm their willingness</u> for collaborating with R&BD to engage selected 'shortlisted' subjects / topics in public 'seminar' and/or 'workshop' events with GSHP-II assistance and using pre-identified international experts as presenters and resource persons;

- (e) Determining the scope and form of <u>involvement of GOG bodies such as GIDB, ESC and GERI</u>, as well as the R&BD 'mainstream', in the execution of such events;
- (f) Preparing options for possible program 'cost-recovery' through sessional fee charging per participants and/or cost-contributions from benefitting sector entities, as alternatives to the anticipated 'wholly GSHP-II funded' approach in the 'pilot' stage; and
- (g) Submitting for R&BD decision a detailed and costed 18-month 'pilot' Program based on activities (a) to (e) above, comprising 5-6 advanced Seminars and/or Workshops in that period to be delivered by the selected collaborating entities in an agreed format(s), and proposing a suitable methodology for monitoring and evaluating the 'pilot' Program results.

<u>Task 1 Deliverable</u>: Comprehensive <u>Submission</u> on the '*Pilot'* Program of Advanced Seminars and Workshops, with cost estimates, funding strategy, program elements, phasing and overall 'calendar', monitoring and management arrangements, for R&BD/GOG approval.

Task 2. <u>Implementation of 'Pilot' Program of Seminars & Workshops:</u>

NB: This Task may only be activated in the event of affirmative decisions by R&BD / GOG (as appropriate) on all or some of the Study recommendations submitted from Task 1, above.

Following R&BD/GOG approval of the (above) Program proposal, undertake 'program management' services throughout the agreed 'pilot' period. This shall at least cover:

- (a) Undertaking <u>essential start-up and expert empanelment actions</u>, <u>program-related administration and accounting/budget processes</u>, <u>event / activity coordination and post-event reviews / assessments</u>, <u>internal and external Program communications and ad hoc 'problem-resolution'</u> for all elements of the endorsed 'events calendar';
- (b) Maintaining <u>close liaison with the executing entities</u> tasked with preparing and delivering individual Seminars and Workshops;
- (c) Regular <u>progress monitoring and reporting</u> for the 'pilot' Program, compliant with overall GSHP-II monitoring / reporting requirements; and
- (d) A comprehensive <u>'end-of-pilot' evaluation of results and impacts</u> (applying the agreed evaluation methodology) to inform subsequent R&BD decision-making about possible options for 'post-pilot' Program continuation.
- <u>Task 2 Deliverables</u>: (a) A detailed **Mid-Program Report** on implementation of the approved 'pilot' Program, including brief 'interim' reviews of (i) the 'expert empanelment' process and (ii) the results monitoring / evaluation methodology; and (b) A comprehensive **Task Completion Report** for the 'pilot' Program including a full 'end-of-pilot' evaluation of Program results and impacts and any recommendations for possible 'post-pilot' action.
- **Task 3.** Study for Road Sector Centers of Excellence: Undertake a Study to determine feasibility aspects and a general framework and 'business model' for possible R&BD-linked Centers of Excellence in Road & Bridge Design & Innovation and Construction Management, for GOG decision-making thereon. This shall at least include:
 - (a) Reviewing and summarizing the <u>instances</u>, <u>concepts</u>, <u>structuring</u>, <u>operations</u>, <u>governance</u> <u>and status of Centers of Excellence in place elsewhere in India</u> that are focussed on (one or more of) infrastructure planning, engineering, construction, financing or management;
 - (b) Assessing the <u>applicability of various Acts, Rules, Regulations, directives and/or policies</u> on Administration, Finance and governance of such Centers in the experience elsewhere, and <u>summarizing their requirements and implications for any such proposed Centers</u> in Gujarat;

- (c) Consulting relevant Gujarat technical institutes / entities to <u>assess their technical capacity</u> <u>and potential suitability</u> for partnering with R&BD in the development of a road sector Center of Excellence in one of the planned thematic areas;
- (d) Determining the appropriate <u>organizational 'anchor points' in the R&BD and/or the GOG</u> for each proposed Center and any necessary <u>measures to ensure adequate R&BD capacity</u> for its role(s) in the implementation and operation of the Center(s);
- (e) Preparing a high-level <u>outline</u> of the concept and 'business model' of each proposed <u>Center</u>, inter alia identifying the mission, prime function(s), expected outcomes, 'top-structure' organization, sector linkages, desirable 'public information / communication / access' measures and (in broad terms) initial activity and program(s);
- (f) Identifying an appropriate <u>methodology for targeting / selection of active partners and stakeholders in each proposed Center</u> from concerned academic, research and industry areas;
- (g) Consulting with leading technical and industry bodies as well as relevant GOG bodies to develop a high-level outline and prioritization of the fields and topics needing to be addressed by each potential Center; and
- (h) Provide <u>comprehensive</u> and <u>actionable recommendations</u> for GOG / R&BD decisions on:
 - (i) The most viable option(s) and model(s) for the development of such Centers by R&BD in the indicated fields in the Gujarat environment;
 - (ii) Proposed 'ownership', 'responsibility' and (as appropriate) partnership / stakeholder arrangements for such Centers;
 - (iii) The likely resources and funding requirements for establishment costs and for initial 3-year operational support for the Center(s) and the most viable funding model(s) for each Center's financing needs, both for the start-up period and for medium-to-longer-term operations;
 - (iv) A general 'business model' and governance framework for all such Centers, taking into account the proposals under items (i) to (iii) above;
 - (v) An outline of the 'mission' and 'business model' for each individual Center and of any individual Center aspects requiring significant variation from the general framework (at (iv) above), and the implications thereof; and
 - (vi) The decisions / measures / actions required of R&BD and/or the GOG to implement the planned Centers within the recommended approach and timeframe.

<u>Task 3 Deliverable</u>: A comprehensive **Report** on the Study findings and recommendations on the respective 'domain' and mission(s), structuring, ownership, operation, resourcing, governance and policy aspects of the proposed R&BD-linked Centers of Excellence, as the basis for R&BD/GOG decision-making.

Task 4. Implementation of Individual Center(s):

NB: This Task may only be activated in the event of affirmative decisions by R&BD / GOG (as appropriate) on relevant Study recommendations submitted from Task 3, above.

Where positive / enabling decisions on (Task 3) Study recommendations have been made, assist the R&BD in finalization and activation of Implementation Plans for the establishment and inaugural operations of the endorsed new Centers of Excellence, including via Workshops and consultations both with concerned R&BD and/or GOG areas and with potential external stakeholders and/or participating entities, and help the R&BD to provide support selectively to individual Centers for up to eighteen (18) months from inception. This shall at least involve:

- (a) Facilitating the setting-up and functioning of a <u>part-time R&BD staff Working Group(s)</u> to be initiated by the Department for its role(s) in the development of these Centers;
- (b) Assisting the R&BD with <u>finalization of the 'initiation package' for each Center</u>, being the 'mission', draft Rules and 'business model', staffing and resources plans, inaugural 'funding / budget' plans and 'public information / communication / access' and reporting mechanism(s);
- (c) Assisting the R&BD in the <u>engagement of partners and collaborators</u> to take the 'lead' role(s) in the operation, management and 'ownership' of each Center;
- (d) Assisting in consultation with R&BD development by selected leaders / partners for each Center of an inaugural 1-3 years' Program of technical activities, operational targets and 'progress & impact' monitoring indicators, within agreed funding and on sector priorities;
- (e) Helping R&BD and the selected partner(s) in the <u>start-up of individual Centers in a phased manner</u>, in line with any prioritization arising from the GOG-level decisions upon the Study results and any other major factors in the R&BD / GOG context relevant to launch timing(s);
- (f) Supporting the R&BD <u>monitoring of each Center's progress in business and operational</u> <u>terms</u>, including for input into the GSHP-II Quarterly Progress Reporting (QPR) process; and
- (g) Providing a <u>detailed Report on the overall Centers of Excellence initiative</u>, its status, outlook and any further major development needs or issues, at eighteen (18) months after the timing of any one Center first becoming operational.
- <u>Task 4 Deliverables</u>: (a) <u>Submission</u> to R&BD presenting the proposal(s) for Centers and a viable 1-3 years' inaugural Program of technical activities in each instance, with operational targets and monitoring indicators; and (b) a comprehensive '**Program Mid-Term Report**' on the overall Centers of Excellence initiative.
- 10. In some aspects of the abovementioned Tasks, the Consultant may also be required to provide expert drafting assistance to the R&BD and the GOG in developing official submissions and/or drafting outputs such as Memorandum of Understanding (MOU), draft Government Orders (GO) and/or other official documents, where these are needed by the client for the implementation of the planned Center(s) and/or new Programs.
- 11. The Consultant's personnel shall in performing these services be required to <u>actively facilitate</u> a process of 'skills / knowledge transfer' to nominated R&BD counterpart staff and/or to the R&BD staff Working Group(s), via tailored local training and other 'on-the-job' and 'exposure' initiatives.
- 12. The monthly and/or quarterly progress reporting undertaken by the Consultant during these services shall be submitted to the R&BD Project Implementation Unit (PIU) in a PIU-determined format for inclusion by the PIU in overall monitoring and reporting on IDAP implementation progress.

Approach to Delivery of the Services

- 13. During the Inception Period (immediately following mobilisation) the Consultant shall in consultation with the client finalize a viable Work Program covering all the above-mentioned Tasks, and to therein also document any major newly-identified / unforeseen 'content' or strategy issues that could jeopardize the satisfactory execution of the services, for early resolution by the client.
- 14. The Consultant shall also liaise regularly with other IDAP-related consultancy teams both directly and through the nominated PMC point in the PIU to ensure an effective two-way flow of information about activities in the respective consultants' assignments that may have 'cross-cutting' effects between various IDAP targets and hence may benefit from active harmonization between the consultants and the Client.
- 15. Given the GOG's commitment to good governance and observance of the Right to Information (RTI) legislative provisions, the Consultant shall in developing that Work Program make due allowance wherever appropriate for open access to their outputs / 'products'. This shall

include facilitation of proactive 'internal' communications to staff of R&BD, GSRDC, GIDB, ESC, IRD, GERI and any other relevant GOG elements about the Tasks and the activities therein. The Consultant's substantive Reports during these services also shall (except where decided otherwise by R&BD) typically be lodged on both the R&BD and the Project websites.

Duration & Location of the Services

- 16. The services shall be completed over *approximately thirty six* (36) *months*, with phasing of mobilization of personnel and other inputs over that period as per the agreed Work Program, which is expected to commence before end-February 2013 and be completed before end-February 2016.
- 17. The principal location for the execution of these services will be the R&BD headquarters' offices in Gandhinagar, Gujarat. However some of the Task activities will necessarily involve the consultants travelling to and working 'off-site' with other R&BD units and/or with intended 'participating entities'. While the details of this would be resolved in due course between the R&BD and the Consultant on a case-by-case basis, the consultants should in framing their proposals anticipate approximately 10-15 significant 'intra-state' travel instances being required in the services.

Key Personnel Requirements

- 18. The Consultant shall provide a team of suitably qualified and experienced 'key personnel' to undertake the assignment on (as far as practical) a 'multi-Tasking' basis, and shall also provide an appropriate complement of support staff. The expected 'key personnel' are shown in the Table below with a non-binding estimate of the likely person-months' input in each case. Overall, it is anticipated that approximately118 person-months of 'key personnel' inputs are required over the 36 months' period of the assignment. However, these estimates of 'key personnel' inputs are only indicative and interested consultants shall make their own estimations in this regard in their proposals.
- 19. Furthermore, as the abovementioned Tasks 2 and 4 may only be activated if affirmative decisions are given by R&BD / GOG (as appropriate) on all or some of the respective Study recommendations, the portion of estimated 'key personnel' inputs linked directly with the execution of Tasks 2 and 4 may require joint review and adjustments between the Client and the selected Consultant(s) at the respective decision-making stages late in Tasks 1 and 3 (see above).

Table of Estimated 'Key Personnel' Inputs

Key Personnel	Tasks Requiring Input	Person-months Input
Road Infrastructure Management Specialist & Team Leader (TL)	All	30
Domain Specialist (Professional Development) & Deputy TL	All	20
Management & Business Administration Specialist	1, 2 & 3	10
Senior Training & HRD Planning Specialist	All	9
Financial Management Specialist	All	9
Senior Highways Engineer (Network Management Specialist)	1, 2 & 3	6
Senior Highways Engineer (Construction Specialist)	1 & 2	6
Senior Highways Engineer (Bridges Specialist)	1 & 2	6
Senior Highways Engineer (Design Specialist)	1 & 2	6
Monitoring, Evaluation & Reporting Specialist	All	6
Communication (Media / Web / Intranet) Specialist	All	6
Drafting Specialist (Statutory & Official Documents)	2 & 4	4
Estimated Total 'Key Personnel' Inputs		118

20. The expected <u>qualifications</u> for the "key <u>personnel" positions only</u> are summarized at *Appendix 1*. While interested consultants may choose to include in their proposals information about possible nominees for proposed supporting staff roles and capacity, any such details are **not** required to be part of a Consultant's proposal(s) and therefore <u>any such details will **not** be taken into account in the **evaluation** of proposals / bids for these services.</u>

Periodic Deliverables & Milestones

- 21. In addition to completion of the specific Task deliverables outlined at Paragraph 9 (Tasks 1-4), the following 'standard' deliverables are also required from the Consultant during these services.
 - An *Inception Report*, presenting the Consultant's post-mobilization approach to the requirements of the main task elements, finalization of both the phasing of inputs and the overall work program for the services period, and outlining any key issues needing further resolution by the client for efficient execution of the overall assignment.
 - > Monthly Reports and Quarterly Progress Reports (MR and QPR) in standard format, due at the end of each month and each quarter during the services.
 - ➤ Various *Workshops* to be facilitated on R&BD's behalf by the Consultant at important stages in each Task, expected to require <u>at least one (1) Workshop per Task</u>.
 - A *Draft Final Report* (DFR) to be submitted one month before the completion date of the services as per contract, which shall report comprehensively on the Consultant's activities, outputs, results and achievements against the substantive requirements in these TOR.
 - ➤ A *Final Report* (FR) to be submitted within two weeks of receipt of R&BD / GOG comments on the DFR and/or in any event no later than the contracted date of completion of the services.

The following Table outlines the total of periodic and per-Task deliverables (at Para. 9 of these TOR).

Table of All Expected Deliverables & Milestones

Deliverable / Output Per Contract	Tentative 'Due Timing'	Quantity Due	Proposed % of Contract Payment
Inception Report (IR) with Work Program (WP)	End of month 1	10	5%
Monthly Reports (MRs) in standard format (x 36)	End of each calendar month	7	(0.25% each) 9%
<i>Quarterly Progress Reports</i> (QPRs) in standard format (x 12)	End of each calendar quarter	7	(0.5% each) 6%
<i>Workshops</i> (including Presentations / Notes / Materials): estimate = four (4) workshops	Timings as per agreed WP	10	(2% each) 8%
Submission on 'Pilot' (18 months) Program of Advanced Seminars & Workshops (Task 1)	End of month 4	7	18%
Report on Study of Road Sector Center(s) of Excellence (Task 3)	End of month 6	7	18%
Submission on 'inaugural 3-year Program' for new Centers of Excellence (Task 2(a))	End of month 8	7	7%
'Mid-Program Report' on implementation of 'Pilot' Program of Advanced Seminars & Workshops (Task 4 (a))	End of month 24	7	7%
Task Completion Report on 'Pilot' Program of Advanced Seminars & Workshops (Task 4 (b))	End of month 32	7	7%
'Mid-Program Report' (Task 2 (b)) on implementation of 3 new Centers of Excellence	End of month 34	7	7%
Draft 'Final Report' (DFR)	End of month 35	7	3%
Final Report (after Client response to DFR)	End of month 36	10	5%
		Total	100%

Reporting, Review & Overall Deliverables-cum-Payment Schedule

- 22. The Gujarat Roads & Buildings Department (R&BD) will be the contractual client for the services and will manage these services through its Project Implementation Unit (PIU), which has overall charge of the new Second Gujarat State Highway Project (GSHP-II). The PIU is expected to be assisted in its GSHP-II responsibilities by an externally-sourced Project Management Consultant (PMC) who *inter alia* will assist the R&BD in the general oversight, coordination and integration of all IDAP implementation activities, including those to be performed in Tasks 1-4 of these services.
- 23. The deliverables under the assigned tasks of the Consultant shall <u>upon their initial 'draft' submission be reviewed by a Review Committee to be established by the R&BD</u> for these services. The Review Committee will be responsible for determining any modifications or changes considered necessary from the Client's perspective in the outputs submitted by the Consultant and the Consultant shall incorporate these modifications or changes in finalizing the outputs. The membership of the Review Committee shall <u>at least</u> be comprised of an R&BD Chief Engineer (as chairperson) and two (2) other senior R&BD officers, all from different Wings / units of the Department plus up to two (2) nominees of the Secretary-R&DB drawn from the GOG Administrative cadre and/or the SPIPA.
- **24.** The acceptance by the R&BD (per clearance of the Review Committee) of each of the scheduled deliverables and outputs will mark completion of those Task elements of the agreed Work Program for these services. Such completion / acceptance may also be chosen as the basis for contractual payment milestones.

- 25. All <u>finalized</u> deliverables due in the form of documents, IT-based presentations, materials and associated files being submitted to the Client are to be supplied in <u>at least the quantities indicated in the Table below</u>, together with full electronic 'soft' copies of the material in each case imprinted on CD / DVD (rendered in Microsoft WORD, PowerPoint and/or EXCEL formats, or otherwise via other software if specifically agreed during contract negotiations).
- 26. The overall outputs and deliverables due in these services from the Consultant and the tentative 'due timing' for these (plus a possible distribution of 'contract payment' allocations) are as follows.

Responsibilities of the Client

- 27. The Client (represented primarily by the R&BD) will be responsible for providing the Consultant's team promptly with necessary documents and materials wherever available, particularly relevant GOG documents related to the structure and functioning of the roads sector in Gujarat, on the main GOG policies, plans and/or strategies in the roads sector, and regarding the IDAP and the GAAP. The R&BD shall also arrange access to other necessary records and data (wherever available) on being so requested with adequate notice by the Consultant's Team Leader.
- 28. The R&BD (usually via the identified Review Committee, in the first instance) shall be responsible for reviewing, providing feedback on and /or advising acceptance of the Consultant's outputs and/or reports. This shall be done by the R&BD within the Consultant's requested timing wherever possible, but in any event shall be done within no more than three (3) weeks of the date of presentation / submission to the Client of such materials by the Consultant requesting review/clearance. Where multi-agency and/or higher-level GOG consideration and responses are required, R&BD management will facilitate that on a case-by-case basis, with some adjustment to the 'turnaround' timing needing to be accepted by both Consultant and Client in these circumstances.
- 29. The Client will upon mobilization of the Consultant's team, nominate senior-level counterpart staff for ongoing direct liaison with the Consultant's team during these services, and will also <u>arrange for a dedicated part-time R&BD staff Working Group(s)</u> to be initiated to give periodic support and guidance to the Consultant's team in the development of these Centers and the seminars / workshops 'pilot' Program. The Client will also arrange access as required to relevant R&BD staff in HQ and field units, and wherever appropriate, shall facilitate introductions for the Consultant's personnel to relevant GOG entities and to any relevant external Gujarat institutions for the purposes of these services. Any other unforeseen 'facilitation' requests by the Consultant's team during these services will need to be resolved in case-by-case consultations between the Consultant and the Client.

Responsibilities of the Consultant

- **30.** The Consultant will be responsible for securing / maintaining suitable office accommodation for their team and its operational requirements, within reasonable proximity to the R&BD headquarters and PIU premises in Gandhinagar, Gujarat. The Client may consider providing space for a modest-size 'liaison office' at PIU for the Consultant's periodic use when working closely with PIU and R&BD management (e.g.) during mobilization and/or in particular Task stages.
- 31. The Consultant shall make their own arrangements for all operating needs, such as power, communications and transport. The Consultant shall also be fully responsible for the provision and maintaining of all facilities, resources and/or services required by their team in execution of the assignment, such as office and IT equipment, communications, support services, consumables, all utilities, vehicles and/or transportation / logistics services. The Consultant shall also be fully responsible for all operational costs and 'overheads' incurred by the Consultant's team in the services.
- 32. Travel from the main R&BD headquarters in Gandhinagar for Task-related activities to various R&BD offices and/or to relevant non-GOG entities will be required during these services. The instances, nature, timing and participants in such travel will be resolved progressively between the R&BD and the Consultant on a case-by-case basis and/or in the Work Program context. However, in

framing their proposals, consultants shall plan for approximately 10-15 significant instances of 'intrastate' travel in their responsibility for all personnel mobility / transport / logistics during the services.

- **33.** The Consultant's 'key personnel' team members shall at all times satisfy the technical 'Qualifications & Experience' requirements stipulated in these TOR (at *Appendix 1*).
- **34.** The Consultant shall also apply their own internal 'quality assurance' processes to all outputs under these services, before submitting such outputs to the Client for review / acceptance.
- 35. The Consultant shall consult with the R&BD regarding relevant R&BD and GOG systems, procedures and statutory requirements, including the GOG security processes and protocols affecting access to official premises, to ensure the Consultant's personnel will be aware of and able to comply with the with relevant official policies / requirements while on official premises during these services.

 $\frac{Appendix \ -1}{Outlite{Outline}} \label{eq:control}$ Qualification and Experience Requirements for Key Personnel

Position	Minimum qualifications	Minimum years of professional experience	Specific Required Expertise
1. Road Infrastructure Management Specialist & Team Leader (TL)	Graduate qualifications in Civil Engineering, plus post- graduate qualifications in Planning, Business Administration, Management, &/or Transportation	15	Essential: Extensive international-standard experience in senior managerial roles in an advanced Road Agency entity and/or as Consultant leading major 'road sector capacity development' assignments. High-level policy and strategic advising skills. Substantial skills, experience and knowledge in at least one major facet of road infrastructure engineering and management. Proven skills in leadership and management of multi-disciplinary teams, and of capacity-building initiatives involving multi-sector collaboration. Proven high-level interpersonal and communication skills. Sound familiarity with the roads sector in India. Highly Desirable: Experience in planning and managing advanced in-service technical and management training and knowledge-building programs for engineering staff at various levels.
2. Domain Specialist (Professional Development) & Deputy TL	Graduate qualifications in Administration, Management, Education, Science, Economics &/or Engineering (any discipline), with additional tertiary qualifications in Research and/or Education / HRD also being desirable.	15	Essential: Extensive experience and service in senior roles in Government/ quasi-Government entities at state and/or national levels in India, with involvement in Research and/or (tertiary) Education/HRD institutions. Wide experience and skills in policy and strategy development, implementation and administration functions in those contexts. Sound knowledge of typical public sector processes in relation to higher-level professional development and HRD in India. Sound inter-personal and oral and written communication skills, proven in complex multidisciplinary environments. Highly Desirable: Demonstrated ability to facilitate strategic collaboration between government, industry and education / research institutes.
3. Management & Business Administration Specialist	Graduate qualification in Engineering (any discipline) or Masters level qualification in Management &/or Business Administration	12	Essential: Extensive senior-level experience in the design and development of functions, organizational and business structures, Rules and processes for new entities in public and/or private sectors in India. Substantial knowledge and experience in 'organizational development' planning and staff capacity-building in such contexts. Sound inter-personal, oral and written communication skills. Highly Desirable: Previous experience in the design, planning and launch of a Center(s) of Excellence or similar. Proven capacity for innovation in similar assignments.

Position	Minimum qualifications	Minimum years of professional experience	Specific Required Expertise
4. Senior Training & Human Resources Development (HRD) Planning Specialist	Graduate qualifications in Management, Education / HRD, Business, &/or Engineering, with additional specialization in Training, Development &/or Adult Learning	15	Essential: Extensive experience in senior roles in HR Management and HR Development (including Training). Proven advisory, planning and operational skills in developing and establishing new organizations in both industry and public sector contexts. Sound experience in devising effective HR strategies and programs for advanced technical 'capacity development' needs. Effective interpersonal, oral and written communication skills. Completion of two comparable assignments. Highly Desirable: Proven expertise at (i) developing strategic plans for 'knowledge building', and (ii) innovation in HRD program 'content', structuring and delivery modalities.
5. Financial Management Specialist	Graduate qualifications in Accounting, Finance, Management, and/or Business Administration, with additional CPA qualifications (or the equivalent)	10	Essential: Sound technical and operational experience and skills in the Accounting & Financial Management functions and requirements of Indian public sector organizations, particularly those having 'utility & services' roles such as PWDs. Sound knowledge and skills in implementing financial modelling and Budget planning, monitoring and reporting for public agencies, semi-autonomous and/or PSU-style entities in India. Completion of two comparable major assignments. Highly Desirable: Proven skills in advising on innovative FM functional and 'process' issues.
6. Senior Highways Engineer - Network Management Specialist	Graduate qualifications in Civil Engineering with post- graduation specialization in Highway Engineering (HE)	15	Essential: Extensive experience and skills in road infrastructure planning and road network management in public sector environments comparable to PWDs. Extensive background and knowledge in a major facet of highway engineering. Proven capacity for planning and managing technical studies / investigations / research relevant to road network management. Completion of two comparable assignments. Highly Desirable: Proven skills and interests in developing strategic measures for advancing HE technical capacity and knowledge.
7. Senior Highways Engineer - Construction Specialist	Graduate qualifications in Civil Engineering with post- graduation specialization in Highway Engineering (HE)	15	Essential: Extensive experience and skills in road infrastructure project preparation and works execution, with particular strengths in construction management. Wide knowledge and specialist skills in roads construction and works management in public sector contexts. Proven capacity for technical studies / investigations / research in the construction management field. Completion of two comparable assignments. Highly Desirable: Proven skills and interests in developing plans and programs for advancing HE technical capacity and knowledge.

Position	Minimum qualifications	Minimum years of professional experience	Specific Required Expertise
8. Senior Highways Engineer - Bridges Specialist	Graduate qualifications in Civil Engineering with post- graduation specialization in Highway Engineering (HE) and additional specialisation in the Bridges field	15	Essential: Extensive international-standard experience and skills in road infrastructure planning and design for major road networks. Wide knowledge and specialist skills in Bridges design and management. Proven capacity for planning and executing advanced technical studies / investigations in the Bridges field. Completion of two comparable assignments. Highly Desirable: Proven skills and interests in initiating measures for advancing (HE) Bridges technical capacity and knowledge.
9. Senior Highways Engineer - Design Specialist	Graduate qualifications in Civil Engineering with post- graduation specialization in Highway Engineering (HE) and additional specialisation in the Design field	15	Essential: Extensive international-standard experience and skills in engineering design and development for road infrastructure projects. Wide knowledge and specialist skills in modern HE design concepts, tools and methodologies. Proven capacity for executing advanced studies / investigations in the Design field. Completion of two comparable assignments. Highly Desirable: Proven skills and interests in planning and implementing measures to advance HE technical capacity and knowledge.
10. Monitoring, Evaluation & Reporting Specialist	Graduate qualifications in Management, Economics, Business &/or Engineering, with additional specialisation related to Monitoring & Evaluation	10	Essential: Extensive experience and skills in the design and operation of IT-based activity monitoring systems for program management purposes in public sector contexts. Relevant experience and skills in framing operating rules and processes for evaluation of program outputs and results for performance review, reporting, planning and governance purposes. Completion of two comparable assignments. Highly Desirable: Proven skills in design and implementation of efficient and sustainable M&E and reporting processes in challenging organizational and business 'start-up' contexts.
11. Communication (Media / Web / Intranet) Specialist	Graduate qualifications in fields related to Media, Public Relations, Communications and/or Public Information Management	10	Essential: Extensive experience in designing and assisting implementation of strategies for public information dissemination and communication in various sectors in India. Wide experience and skills in developing and operationalizing both 'conventional media' and IT-based / Web-enabled information programs and communications with industry, government and/or civil society groups as stakeholders. Sound awareness of current "public disclosure" and/or "right to information" provisions in India as applicable to public information programs. Completion of at least one comparable major assignment in India. Highly Desirable: Previous experience of the public and private sector elements of India's roads sector and their contemporary challenges.

Position	Minimum qualifications	Minimum years of professional experience	Specific Required Expertise
12. Drafting Specialist	Graduate qualifications in Law, preferably with additional specialization in Corporate Law and/or Legislative Drafting	15	Essential: Extensive experience as legal professional and practitioner in public, administrative and/or contract law. Sound knowledge and experience of India's legal framework, processes practices as these relate to public legislation, statutes, Rules and/or Orders affecting the operations of public sector entities. Proven skills at drafting of legal and statutory documents and preparation of related Submissions and/or announcements.

Appendix 2

Summary Matrix of Institutional Development Action Plan (IDAP) 2013-2019

India: Second Gujarat State Highway Project (GSHP II) (P114827)

Management (summary-level) Matrix, based on GoG approvals of 2012

S. No.	Objective	Key Result(s) Expected
	: Planning	
1.	Updated long-term state road sector policy framework	State Road Sector Policy (1996) comprehensively updated and published by R&BD State 'road classification & responsibility' framework updated
3.	Enhanced state road network planning & development GoG 'nodal capacity' for roads PPP policy and management	Comprehensive medium-term GOG roads master planning based on transport and socio-economic developments and goals in Gujarat Pre-investment studies, network development plans and related policy / institutional studies, completed Lead capacity established in R&BD / GSRDC for state-level roads PPP policy development, monitoring and
4.	Dedicated capacity for Road Safety policy, strategy & action	implementation assistance GOG 'Project Steering Committee' established State 'lead agency' functions and capacity in place Determination of medium-term state Road Safety Management policy, strategy and priorities
5.	Effective sector mechanisms and capacity for governance & accountability	Medium-term GOG-endorsed GAAP underway* R&BD-wide Monitoring & Evaluation (M&E) process and Performance Management tools in place
R&BD's	s-Operational Capacity Development	-
6. 7.	Strengthened sector functions and capacity for Quality Control & Management Enhanced R&BD capacities in project planning, design, road	Capacity-building / training for QC Wing functions and accountabilities in R&BD works, completed Upgraded / new technology for field QC testing deployed by QC Wing / GERI (with staff training) Pilot ISO 'QM' Certification program completed E&SM Cell re-staffed and operational in R&BD with updated functions / policies and dedicated resources
	safety, environment & social management (E&SM), preconstruction actions and contract management	Training-supported and phased 'mainstreaming' of E&SM functions and processes, R&BD-wide Integration in 'mainstream' R&BD functions of activity progress / M&E / performance reporting Training-supported capacity building in R&BD in road safety engineering concepts / standards / skills Enhanced capacity and resources of R&BD in Design and Design-review functions at HQ level Enhanced capacity of R&BD staff in works project planning and in managing pre-construction activities Training-supported R&BD-wide implementation of standard Project Management system and guidelines Training-supported R&BD-wide strengthening of works Contract Management process and skills
8.	Updated framework of Works policies, authority & rules	Comprehensively updated R&BD works Code & Manual (with new Safety and E&SM sections) endorsed by GoG and published

S. No.	Objective	Key Result(s) Expected
9.	Strengthening of R&BD Wings capacities, services delivery & governance	Study for plans for key capacity and performance improvements in main R&BD Wings, completed.
		Major study-based action plans being implemented
10.	Enhanced R&BD staff Training & Development program scope and delivery	Updating of RBD 'core skills / capacities' training policy and program planning for new and ongoing priorities in knowledge, skills and 'awareness' fields Enhanced R&BD staff Training Program underway
11.	R&BD-centered HR Planning & Management Strategy in place	Study-based development and implementation of new R&BD strategy for HR 'demand, supply and development' management in key staffing categories 'Pilot' of 'twinning' and 'staff interchange' programs with overseas advanced roads agencies, underway
12.	Strengthened IT and ICT facilities and capacity to support RBD planning, works and asset management, MIS and governance	IT-ICT-MIS strategic needs Assessment done and a prioritized R&BD-specific Plan prepared R&BD-dedicated Data Center(s) established and supporting networked operations, agency-wide Lead IT unit established/operational in R&BD for Data Center(s) management and IT-ICT functions Upgrading key software in GRMS* and other tools (*for both R&BD and wider GOG planning needs) Advanced mobile comprehensive road management data collection capacity, acquired and operational External (transitional) resources for field level IT-ICT user support, data collection (etc.), in place
Knowle	dge Building	support, data concertor (etc.), in place
13.	Enhanced Engineering Staff College (ESC) scope, responsibility, capacity and sector linkages	Study (with regard to SPIPA model and experiences) on re- development of ESC business plan/strategy, collaborative linkages and funding, to meet evolving sector / industry HRD needs and priorities, completed Study-based re-development of ESC underway
14.	Enhanced Gujarat Engineering Research Institute (GERI) sector role / scope / services and capacity	Study on re-development strategy / options for enhanced sector role for Gujarat Engineering Research Institute (GERI) in <i>Works Quality Research & Testing</i> (maybe Center Of Excellence) Study-based re-development of GERI, underway
15.	Fostering sector-wide advances in road infrastructure planning, design, management and governance concepts, knowledge and applied science	Study-based preparation of development plan for Center/s Of Excellence for (e.g.) <i>Road & Bridge Design Innovation</i> and <i>Construction Management</i>
	Knowledge & Capacity Development (co	
16.	Ongoing expertise/ knowledge transfer on 'best practice' in roads management	Study-based initiation with collaborating faculties and institutes of 'pilot' sector program of local Seminars / Workshops on advanced roads management topics featuring internationally-experienced experts Initiation of ongoing R&BD access to and selective participation in international apex professional associations/bodies, aligned with the R&BD sector role and its strategic HRD aims

(*While the GAAP has been confirmed with the GOG as a' stand-alone' document, the main GAAP activities will be implemented in concert with the IDAP)