E-Mail

Phone: 011-25686842 Mob : 0-8415927181

Headquarters

Dte General Border Roads Seema Sadak Bhawan Ring Road, Delhi Cantt, New Delhi -110 010

31 Oct 2018

24006/DGBR/Policy/ (/EPC Cell

HQ ADGBR (North-West) Sec-48-C, Near Motor Market Chandigarh-160047

HQ ADGBR (East)

C/o 99 APO Pin – 900885

HQ CE (P) -----C/o 56 APO

HQ CE (P) -----C/o 99 APO

GUIDELINES FOR PROCUREMENT, PREPARATION, REVIEW AND APPROVAL OF DPR

- 1. Reference:
 - a) 24006/DGBR/Policy/04/EPC Cell dated 29 May 2018.
 - b) 24006/DGBR/Policy/21/EPC Cell dated 10 July 2018.
- 2. For preparation of DPR and approval thereof, referred policy letters were issued. However, it is felt that there is urgent need to further streamline the procedure for preparation of DPR so that quality DPR gets prepared in minimum possible time.
- 3. Stage wise time required for preparation of DPR of Highways in Stipulated time periods of 08 months and 04 months are tabulated below:-

S/No.	Otage	Time required (in days) from date of commencement		Remarks
		Time period (08 months)	Time period	
	Inception report	30	25	(i) Preliminary design work should commence without waiting for feasibility study to be completed. (ii) Stage 3,5 and 6 shall run in parallel with stage 2 & 4.
2.	Feasibility report including Approval of Alignment	105	60	
3.	LA & Clearance - I Report	120	70	
4.	DPR		70	
5.		210	105	
J.	Technical Schedule	165	105	
3.	I A & Clearance U.D.			
	LA & Clearance – II Report	240	120	

Stage-1: Inception Report (IR)

- The completion of Inception Report (Stage 1), within stipulated period becomes vital 4. for timely preparation of DPR, hence it needs sub-activities wise elaboration. IR should be prepared on the basis of preliminary survey i.e. Reconnaissance. The sub activity involved in
 - Topographical features of the area including its soil and drainage conditions. (i) (ii)
 - Typical physical features along the existing alignment within and outside of ROW.
 - Traffic pattern and preliminary identification of traffic homogeneous links as well (iii) as congested areas on the existing alignment. (iv)
 - Possible alignment alternatives (if required), however efforts to be taken to minimize the land acquisition.
 - Realignment requirements including provisions of Bypasses, ROBs, Bridge (v) locations etc. with possible alternatives.
- After analyzing the data and information obtained from preliminary survey the 5. following major aspect to be submitted with IR:-
 - Project appreciation (i)
 - Detailed methodology to meet the requirements of Terms of Reference (TOR) (ii) (iii)
 - Task Assignment and Manning Schedule
 - (iv) Work Programme
 - Proforma for data Collection for Inventory of Road/Bridges, Traffic Census, (v) Sub-Soil investigation etc. (vi)
 - Design standards and proposed Cross-sections
 - Key plan and Linear plan (vii)
 - Development plans and impact thereof on the Highway Project. (viii)
 - Quality Assurance Plan (QAP) (ix)
 - (x) **Draft Design Standards**

Stage-2: Feasibility Report

The feasibility study of the Highway Project should commence after acceptance of IR and encapsulated in the following sub-report :-(i)

- **Executive summary**
- Project description including possible alternative alignments/bypasses and (ii) technical/engineering alternatives (iii)
- Methodology adopted for the feasibility study
- Socioeconomic profile of the project areas (iv)
- Indicative design standards, methodologies and specifications (v)
- Traffic surveys and analysis (vi)
- Environmental screening and preliminary environmental assessment (vii) (viii)
- Initial social assessment and preliminary land acquisition/resettlement plan (ix)
- Cost estimates based on preliminary rate analysis and bill of quantities (x)
- Economic and financial analysis
- Conclusions and recommendations (xi)

- 6. It has been noticed that an inordinate delay is repeatedly occurring in finalization of Stage-1 & approval of alignment since detailed survey is being carried out without finalization of alignment which leads to infructuous effort. However the requirement of Green field alignment or Bypasses should be projected as per the data derived from the Reconnaissance and preliminary traffic study. Following steps are to be followed to squeeze the time line:-
 - (i) A minimum 03 (three) suitable alignments options should be worked out on the basis of Carto-Sat images or Google images and rough anticipated cost estimate thereof.
 - (ii) The presentation for finalization of alignment should be carried out at HQ Project Level under Chairmanship of Chief Engineer Project in presence of respective Cdr Task Force & OCs RCC. Sequential presentations at RCC & TF level will not be held. The most suitable/appropriate alignment should be identified and finalized on the basis of Site conditions, Techno-economic consideration & User requirement. In normal circumstances 5 to 6 Week time is sufficient for finalization of Alignment by the Chief Engineer, Project.
 - (iii) The selected alignment to be forwarded for formal approval of respective ADGBR for road works to be funded by MoD as per HQ DGBR letter No. 24006/DGBR/Policy/04/EPC Cell dated 29 May 2018. However case for Approval of investment & Alignment approval to be forwarded to respective RO/CE of MoRT&H in case of works which are to be funded from MoRT&H.
- 7. Notwithstanding the above, the detailed survey on the finalized Alignment should be carried out to avoid sequential delays in preparation of DPRs. For preparation of Feasibility Report, Detailed Field Survey has to be carried out on the finalized/approved alignment only and it would essentially include the Topographic survey, Field Investigations/studies etc.
- 8. <u>Topographic Survey:-</u> The main objective of this survey would be to capture essential ground features along the alignment in order to consider improvements, rehabilitation and upgrading of Highway with respect to user requirement and assessment of cost thereof.
 - (i) Topographic Surveys along the existing Right of Way (ROW) to be carried out by using LiDAR or equivalent technology with stipulated accuracy along the existing road and realignments wherever required and properly referencing the same with reference pillars fixed on either side of centre line at safe places within the ROW. The surveyed alignment shall be transferred on the ground by providing Reference Pillar and Bench Mark of Size 15cmX15cmX45cm, made of RCC with M15 grade of Cement Concrete. It should be placed on ground with spacing of 250m c/c.
 - (ii) Wherever there is a proposal of realignment of the existing Highway and/or Construction of New Bypasses Consultant shall fix Boundary Pillars along the proposed alignment on the extreme boundary on either side of the Highway at 50m interval.

However the details & Topographic Survey are also itemized at para 4.11.2 of Terms of Reference (TOR) for Consultancy Services in RFP.

- 9. <u>Field Investigation/Studies:</u> In addition to the topographic survey following investigations/assessments have to be carried out for Detailed Design of Road and Pavements, Bridges, Structures etc.
 - (i) Road inventory survey
 - (ii) Pavement investigation
 - (iii) investigations for bridges and structures
 - (iv) Hydraulic and Hydrological investigations
 - (v) Geo-technical Investigation and Sub soil Investigation
 - (vi) Material Investigations
 - (vii) Environment and Social Impact Assessment
- 10. The detailed field studies should be carried out as per latest revision of MoRT&H specifications in respect of road and pavement. The data collected through road inventory and pavement investigations should be sufficient to meet the input requirements of Highway Development and Maintenance Management System (HDM–IV). However the Economic Analysis / benefit and cost streams should be worked out for the project using HDM-IV or other internationally recognized life-cycle costing model. Based on the above ground survey and investigation, Feasibility Report will be processed for approval of Competent Authority.
- 11. It shall be required to complete the rest stages of preparation of DPRs within given time frame as indicated in para 3 above as being an independent/partially independent stages, which can be progressed without waiting for approval of Alignment Plan. However a Policy Guideline has already been issued vide letter under reference dated 10th July 2018 for finalization of draft DPRs & its approval thereof.
- 12. Chief Engineer Projects are requested to ensure strict compliance of the above instructions and content of this letter shall be brought to the notice of all stake holders for their implementation.
- This issues with the approval of DGBR.

(R K Garg)

SE (Civ)

Dir (EPC)

For DGBR