



# भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)

## National Highways Authority of India

(Ministry of Road Transport and Highways, Government of India)

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### NHAI/ Policy Guidelines/ Consultancy/ 2024

#### Policy Circular No.10.2.34/2024 dated 10<sup>th</sup> January, 2024

{Decision taken on E-Office File No. AE/IE/Service\_Improvement Comp. No. 234206)}

**Sub: SOP to improve Authority's Engineer's/ Independent Engineer's/ Supervision Consultant's Performance and better Contract Administration.**

1. A Committee was constituted during the Manthan meeting conducted on 23<sup>rd</sup> Jan 2023 to deliberate on the poor performance of the Authority's Engineer (AE) / Independent Engineer (IE) / Supervision Consultant's (SC) mainly on account of COS and EOT pendency and recommend reforms for improvement over the current practice and prevailing provisions of the Contracts.

The Committee conducted the root cause analysis on the poor performance of AE/IE/SC through internal deliberation and stakeholder consultation and identified the following areas of improvement in the performance of AE/IE:

- i. Competency of Manpower deployed at Site.
- ii. Inadequate mobilization of Manpower at the Site.
- iii. Lapses in design review obligations.
- iv. Lapses in quality control obligations.
- v. Lapses in construction supervision obligations.
- vi. Failure in conducting tests in O&M projects as per the predefined frequency.
- vii. Discrepancies / delays in submission of test reports / MPRs.
- viii. Resistance towards the use of new materials / innovative technologies in construction.
- ix. Challenges in contract administration (EOT/COS).

2. **Actionable Point by RO/PD/Technical Divisions:** Based on the submissions made by the Committee in 594<sup>th</sup> EC Meeting dated 15.12.23 (Agenda#594.22) , the following actionable points have been approved for immediate implementation:

S N	Subject	Action Points	Action by
2.1.	Competency of Manpower deployed at the Site	Authority shall approve/reject replacement CVs in a Time-bound Manner, not later than 30 days from submission.	PD
2.2.	Lapses in Design Review Obligations	Broad Design Principles and schedule of submission and review shall be finalized in the	PD

S N	Subject	Action Points	Action by
		<p><b>Kick-Off Meeting</b> to be conducted at an early date (within a week from the Appointed Date).</p> <p>The Contractor and AE/IE to conclude design reviews within 15 days (30 days for Major Structures). In case of disputes, PD shall intervene and conclude within 30/45 days.</p>	
2.3.	Lapses in Quality Control Obligations	<p><b>Systemic Improvements:</b></p> <p>RFIs to be selected intelligently on a representative sample basis. Efficient Testing shall be ensured through RFI digitization.</p>	AE/IE
2.4.	Lapses in Construction Supervision Obligations	<p>Consultancy HQs to monitor the Teams and their performance at the Site regularly.</p> <p><b>Enabling Provisions:</b></p>	
2.5.	Failure in conducting Tests in O&M Projects as per the pre-defined frequency	<p>75% of bill raised by the Consultant shall be paid within 72 hrs and the remaining bill may be paid after due scrutiny.</p>	PD
2.6.	Discrepancies / delays in submission of Test Reports / MPRs.	<p><b>Deterrent Actions:</b></p> <p>PD to monitor these lapses as per the Checklist before certification of the Monthly Consultancy Bills. (Enclosed as Appendix-3 Checklist (i))</p>	
2.7.	Subjectivity on the list of supporting documents to be submitted by the Contractor	<p>Checklists is developed for EOT and COS proposals and to be diligently followed by the Contractor while submitting the proposal and AE/IE shall ensure the same. (Enclosed as Appendix-3 Checklist (ii) to (v))</p>	CO AE/IE PIU
2.8.	Lack of a robust IT system/ SOP with Consultants for monitoring EOT / COS issues internally across their portfolio of Projects.	<p>An internal SOP by AE/IE HQ is to be developed for efficient monitoring the EOT/COS review. Use of prevailing ERP software to be adopted by Consultants for systematic functioning.</p>	AE/IE



S N	Subject	Action Points	Action by
2.9.	Verification of the clarifications sought by AE/IE.  Multiple correspondences between the Contractor and AE/IE on the clarifications.	<p>Clarifications shall be sought only once by AE/IE. In case of multiple instances, PD shall be informed by AE/IE prior to seeking clarifications duly giving reasons why the query was not asked in the first instance.</p> <p>In the event of an unsatisfactory reply (Checked against the Checklist) in two instances for the same project/multiple projects in a PIU, the default notice shall be issued with a copy to RO &amp; HQ.</p> <p>A List of such default notices shall be updated by the NHAI HQ team with the date of issue of notice. The validity of default notices for the purpose of tendering shall be decided by the Member concerned.</p> <p><b><u>Similar arrangement for Contractor:</u></b> If the contractor fails to submit a satisfactory reply on COS/EOT matter, the delay in EOT for that period of unsatisfactory reply would be on Contractor's account.</p>	PD
2.10.	Disputes in approved COS/EOT Claims vs Recommendations	PD shall conduct a joint meeting in case AE/IE and Contractor are not arriving at the same terms within 20 days from proposal submission by Contractor.	PD

3. **SOP for Manpower procurement/replacement:** Inadequate competency of Manpower deployed at the site by the consultancy firm is one of the major reasons for the poor performance of the AE/IE teams deployed at site. To stop the delays in the appointment of AE/IE and to conduct interviews of the Key personnel through 2 to 3 Expert Teams/committees. Guidelines were issued vide Policy Guidelines no. 10.1.30/2021 dated 15.11.2021 followed by corrigendum vide policy circular 10.1.35/2022 dated 11.10.2022.

In this regard, to ensure the competency of the manpower deployed at the site and to expedite the interviews and thus deployment of the Key Personnel, it was decided that the following system shall be followed from immediate effect:

- 3.1 The empanelled Quality Team Leaders may also be considered for inclusion in the Expert Teams. It is further directed that the Technical Divisions / ROs will notify the SRD&Q Division for interaction of key personnel after taking approval of competent Authority, which will coordinate as the nodal division for allocating the projects to the

Expert Teams within a period of 7 days after receipt of the proposal. The Expert Team assigned for the Key-personnel interaction for the Project shall conduct interview within 7 days.

Keeping in view this provision, the Policy Guidelines no. 10.1.30/2021 dated 15.11.2021 shall Deemed modified after issuance of this SOP to extant of Power for formulation of Expert Teams from Concerned Member to In-charge Member Quality Division and SRD&Q will be Nodal as per this SOP provisions. However other provision policy circular dated 15.11.21 and corrigendum dated 11.10.22 shall remain unchanged.

Constituents of the Expert Teams:

In case of bids invited from RO Level,

- i. Member-1: Concerned RO.
- ii. Expert Team Member-2: Advisors/Jt. Advisors - 1 no.
- iii. Expert Team Member-3: 1 no.

In case of bids invited from NHAI HQ,

- i. Member-1: Concerned CGM (T)/GM (T) NHAI HQ.
- ii. Expert Team Member-2: Advisors/Jt. Advisors - 1 no.
- iii. Expert Team Member-3: 1 no.

- 3.2 In light of the above, 3 committees as above should be formulated by the SRD&Q Division within 7 days. As per requirement, additional committees shall be formulated on approval of the Member in-charge of the Quality Division. Expert Teams to take the interviews through VC of the Key Personnel of H-1 Consultant after issue of LOA of consultancy assignments under their jurisdiction. The proceedings of VC shall lie on Data Lake as a record. If any Key Personnel is found not suitable, such person will not be allowed to participate for 3 months in NHAI's projects. The Consulting Firm will be given one opportunity to replace unsuitable person with a person of equal or better CV, and no reduction in remuneration shall apply to such replacements. If Consultant fails to produce alternate CV within 7 days or alternate CV/ Person is also not found suitable by the expert team, then the consultancy firm shall be given further opportunity to replace the unsuitable person with reduction in remuneration of that position @10% for such replacement till suitable key person is made available and he is found suitable by expert team.

The key personnel proposed by the consultancy firm and found suitable by expert team of NHAI through interaction shall remain eligible for the same position for 3 (three) years from the date of interaction in case they left the project for any justified reason and are subsequently proposed for other projects.

- 3.3 The Expert Team as set up above will also conduct the interviews of the key Personnel deployed in ongoing projects, where the progress of civil works is 50% or less, as a one-time exercise in the order of the oldest project first, following the same process as at para 3.1 above. If any person(s) is (are) found unsuitable by the Expert Team, such



person(s) will be demobilized immediately & will not be allowed to participate for 3 Months in NHAI's projects and the Consultant will be given an opportunity to replace such person(s) within 7 days failing which the Consultant will be kept on non-performer list so that they do not bid in future projects of NHAI till they replace the unsuitable person(s) with equal or better CV. In such interactions, PD shall present the performance of the consultant/ Key Personnel so far on the project including quality of supervision/ inspections/ NCRs/ digital MPRs, delays in decision-making like COS, EOT, approval of drawings, etc. Expert Team may prescribe a format for this feedback from PD.

3.4 During the above interactions of the Expert Teams, the MD or Permanent Director duly authorized by the Consulting Firm shall be present.

4 **SOP for IE/AE Deployment at Site:** To tackle the issue of inadequate mobilization of manpower at the site by the concerned AE/IE, the commencement of AE/IE Services shall be regulated by the respective ROs with mobilization at a single go or in a staggered manner on a case-to-case basis. Guidelines in this regard are given below for immediate adoption:

4.1 It has been noted with concern that the Consultants are notifying the commencement of Services by mobilizing support staff such as Office Managers, Accountants or Sub-professionals. The Key personnel are not mobilized for a long period and Consultants start submitting invoices treating such mobilization as commencement of services.

4.2 In order to regulate the deployment of IE/AE Staff, the commencement of services by the consultants shall be considered only from the date on which Team Leader has reported to the Project Director unless allowed otherwise in writing by the concerned ROs. It must be ensured that on the date of commencement, at least 50% of the full-time Key Personnel are available at the Site. The payment of the invoices shall be dealt with accordingly.

4.3 Further, it has been noted that Consultancy Firms are being forced to mobilize their manpower in a staggered manner even though the Personnel are available for immediate deployment at the sites, leading to idling costs being borne by the Consultants. As such, the ROs/PDs shall encourage deployment of maximum Key Personnel during the initial days and ensure the utilization of their Services during the Development Period.

4.4 This may be notified to all the consultants under the jurisdiction of the ROs and complied accordingly.

5. **SOP for conducting Kick-Off and other Meetings:**

5.1. Pre Kick-Off Meeting - PD shall hold monthly pre Kick-off meetings with the DPR Consultant, AE/IE and Contractor/ Concessionaire during the Development Period of the Project to discuss the status on fulfilment of the Conditions Precedent and Design & Drawings.

5.2. Kick-Off meeting - The Kick-Off meeting shall be invariably conducted by RO/PD within 7 days of declaration of Appointed Date amongst all the Stakeholders, i.e., DPR Consultant, LA and Environmental Expert, Utility Expert, the Contractor/ Concessionaire (with its Design Director), Authority's Engineer/ Independent Engineer and Field Officers at PIU to understand the Project requirements at Site, Design Submission Requirements and submissions outlook and stakeholders perspective; and to develop common modalities for timely submission and approvals of Contractor's Documents (Design & Drawings, Methodology, Quality Assurance Plan, Work Programme and any other Document as per the Agreement).

The Kick-Off meeting to be followed by a Site Visit and the proceedings to be recorded, circulated to NHAI HQ and uploaded on the Datalake Portal. Variations w.r.t. Schedule B & C to be broadly identified.

The draft Agendas for the Kick-Off meeting is given below for immediate implementation by the ROs/PDs at their respective Sites:

S N	Subject	Agenda
A	Design & Drawings	<ul style="list-style-type: none"> <li>i. Finalizing <b>SOPs/Checklists</b> for submissions and review of the Designs and Drawings.</li> <li>ii. <b>Sequence</b> of submission and corresponding review of Designs &amp; Drawings.</li> <li>iii. The Schedule shall be devised in such a way to complete the approvals before <b>AD+3 Months</b> in EPC Projects and <b>AD+6 months</b> in HAM/BOT Projects.</li> <li>iv. <b>Alternate/Innovative Materials/Technology</b> proposed for use in the Project.</li> <li>v. <b>Design principles</b> involving broad parameters like FRL, HFL, Catchment area, velocity of stream, Scour Level, Discharge, requirement of additional Structures/CD works and Soil parameters based on Geotech investigations.</li> <li>vi. <b>Variation from the provisions of Schedule B and C</b> to be broadly identified.</li> </ul>
B	Other Agendas	<ul style="list-style-type: none"> <li>i. Identification of <b>critical sections/Bottlenecks</b> of the Project for prioritization in the Work Programme.</li> <li>ii. <b>Structure of the Baseline Work Programme</b> with the schedule of submitting the revised Programme during the Execution. Features of the Work Program are as below: <ul style="list-style-type: none"> <li>a) The <b>Project Management Tool / Software</b> for developing and submitting the Baseline Programme to be finalized during the meeting. (Tilos, Primavera or equivalent)</li> </ul> </li> </ul>



S N	Subject	Agenda
		<ul style="list-style-type: none"> <li>b) The order in which the Contractor intends to carry out the Works, including the <b>anticipated timing of design and stages of Works</b>;</li> <li>c) <b>Resource mapping (Manpower, Machinery and required financial inputs)</b> with all the Activities;</li> <li>d) <b>Network-based programme with the Critical Path</b>;</li> <li>e) The <b>sequence and timing of inspections and tests of critical activities</b> as per the requirement of Codal provisions.</li> <li>f) The <b>particulars for the pre-construction reviews</b> and for any other submissions, approvals and consents as required in the Agreement;</li> <li>g) <b>Micro-level Programme</b> with resource mapping for every 2/5 km stretch and Major Structures in the Project.</li> </ul> <ul style="list-style-type: none"> <li>iii. Formats/ modalities of <b>Quality Assurance Plan, Methodology, Traffic Management Plan, Environment Management Plan etc.</b> to be submitted by the Contractor/ Concessionaire.</li> <li>iv. COS works identified by the Contractor/Concessionaire to be reviewed.</li> </ul>

Indicative attributes of a Robust Work Programme and Hindrance Register is enclosed as *Appendix-1* and *Appendix-2* respectively.

- 5.3. At AD+2 months, a follow-up meeting to the Kick-Off meeting above shall be scheduled. The meeting to be chaired by the RO. COS items to be reviewed and Plan & Profile drawings to be finalized.
- 5.4. At AD+4 months, this follow-up meeting to be chaired by the GM/CGM, NHAI HQ and to be conducted at the Project site itself. COS as per the Normative Costs to be firmed up for approval by the Competent Authority. Bottlenecks/Critical Sections of the Project to be identified. Alternate/Innovative Materials/Technology proposed for use in the Project to be firmed up.
- 5.5. At AD+5 months, a meeting to be scheduled at the level of the concerned Member to finalise all the issues raised in the previous meetings above. Agenda Items to be submitted by the ROs atleast 1 week in advance.
- 5.6. At AD+5.5 months, the COS proposals to be submitted on E-File along with its impact on the Project Schedule, if any.
- 5.7. The Schedule of these meetings shall be available on the respective Datalake log-in pages of the Members/CGMs/GMs with alerts for advance planning.

Further, the following Dos and Don'ts w.r.t. COS proposals are strictly adhered to so that the submission and approval processes are streamlined:

Dos	Don'ts
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<ol style="list-style-type: none"> <li>1. All the COS claims shall be first submitted for In-principle approval through Normative Costs.</li> <li>2. Clarifications shall be sought only once by AE/IE. In case of multiple instances, PD shall be informed by AE/IE prior to seeking clarifications duly giving reasons why the query was not asked in the first instance.</li> <li>3. All COS cases shall be submitted along with its Time implication on the overall Project Completion Schedule.</li> <li>4. The Design principle used in the adjacent Packages along the corridor shall be first checked and normalized for uniform principles across a corridor.</li> </ol>	<ol style="list-style-type: none"> <li>1. The COS Work shall not be executed at the Site without issuance of COS Order by the ROs, or concurrence of in-principle approval by the concerned Member in MoM.</li> <li>2. The practice of Conditional Approval, taking Undertakings from the Contractors on COS cases, Transfer of Savings shall not be followed while recommending to HQ for approvals.</li> </ol>
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6 **SOP to streamline COS/EOT:** The following Action Points should be implemented to streamline the EOT and COS processes:

6.1 Recommendations on streamlining EOT Process:

S N	Action points	Action By
I	The <b>Baseline Work Programme</b> shall be updated <u>every month</u> as per the updated Hindrance Register (Impacted Programme on Project Management Tools) to assess its impact on the Critical Path and the overall Project Completion Schedule and shall be included in the MPR.	AE/IE
II	<b>Event notification</b> shall be done within 15 days of occurrence otherwise not to be entertained.  Necessary evidence shall be submitted. Efforts shall be made to optimize the work programme using the PERT/CPM to ensure the utilization of available time float for completion within the scheduled completion. Sufficient evidence carrying out the efforts shall be submitted.	CO AE/IE
III	PD& RO shall take proactive steps in the development period and devise a <b>communication platform</b> for better and transparent communication.  There is a tendency for delay reasons to be shifted to the other side by the Authority and Contractor. To offset the risk of EOT claims, a communication platform may be devised such as a WhatsApp group with members from Contractor, State and other stakeholders.	PD



S N	Action points	Action By
	<b>Formal Communication of delay by Contractor shall be promptly replied by PD through vetting by the legal professional to be placed at the disposal of PD/RO.</b>	
IV	To regulate the Contractor's tendency to shift delay on part of the Authority, PD through AE/IE and/or through its own staff shall monitor the <b>Contractor's logistic preparedness</b> to execute the project, such as requisite NOCs/ Approvals are in place, Availability of sufficient materials, machinery and manpower, availability of lab facilities, etc. The same shall be certified by AE/IE in their monthly MPR with supporting geotagged photographs of P&M, Aerial photographs of Camp and muster-roll copy of Employees in monthly MPR.	AE/IE
V	EOT entitlement for all the accumulated Delay events, if any. to be submitted along with a detailed proposal every 4 months by the Contractor.	CO
VI	Contractor should submit updated monthly program in scheduling software to AE along with his MPR or as per the frequency agreed during the Kick-Off Meeting.  AE to review the Monthly updated program and check the progress of critical activity for any potential delays.	AE/IE
VII	Authority's Utility Expert to be involved from AD itself for assessment of the Utility Shifting requirements and verification of Estimates.	PD/RO
VIII	Works on any land not handed over within AD+20% of CP shall be removed from the scope of the works as per NHAI Policy Circular no. 8.3.37/2020, dated 14.08.2020.  However, respective Members can take the decision on whether the works on balance land to be executed through the same contractor or to be executed through a separate contract.	PD/RO
IX	Delay Analysis to be done as per the Excel Sheet circulated via NHAI Policy Circular no. NHAI/IT/29/2020/2 dated 06.01.2020.  The <b>Delay analysis</b> should be independently reviewed by the AE/IE using IT tools (MS Projects, Primavera).	CO AE/IE
X	Meetings shall be conducted at the Site as per the following Schedule to review the Progress and the EOT proposals:  a) At the time of Scheduled <u>Milestone-I</u> achievement: Chaired by RO. b) At the time of Scheduled <u>Milestone-II</u> achievement: Chaired by GM/CGM. c) At the time of Scheduled <u>Milestone-III</u> achievement: Chaired by Concerned Member.	PD

S N	Action points	Action By
	The EOT proposals shall be presented by the respective PD/AE/IE. Further, the Hindrance Register shall be reviewed in each of the above meetings.	

## Proposed Timelines for EOT Cases:



## 6.2 Recommendations on streamlining COS process:

S N	Action points	Action by
I	Any COS arising due to change in design because of schedules should be initiated within preferably 2 months from the AD. The COS claims shall be rejected/approved within 40 days from initiation. In case COS Notice is greater than the time above, then the reason for the delay in identification is to be submitted along with COS Proposal.	PD
II	During DPR Preparation, PD shall promptly interact with local District Administration, MPs, MLAs, etc. for Project scope-related demands. For projects under Tendering, Development Period or at the initial period of Construction, PD shall promptly interact with District Administration for any additional demands on the Project within AD+180 days.	PD
III	All the COS claims shall be first submitted individually for In-principle approval through Normative Costs. The In-principle approval may be granted through a MoM issued during the site visits of the member, if any, otherwise as per due present process. Works shall commence immediately after In-principle approval.	CO AE/IE PD
IV	Delegation of Power as extant NHAI policy should be used for prompt decision on COS.	-
V	All COS cases shall be submitted along with its Time implication on the overall Project Completion Schedule.	CO AE/IE

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Proposed Timelines for COS Cases:



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→ Recommend

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**Appendix-1**

Indicative Attributes of a Robust **Baseline Work Programme**:

1. **Microlevel:** Should contain sub-programmes for Hindered stretches, Underpasses, Major/Minor Bridges, 2-km road stretches, culverts, Toll Plazas and other Project Facilities.
2. **Responsive:** The activities shall be linked with each other duly indicating the **Critical Path** using Project Management Tools. Any change in one activity in the Programme shall reflect the change in duration of the subsequent activities. The time float available should be judiciously utilized and ensure the same shall not lead to multiple critical activities.
3. **Realistic:** The durations of the activities shall be realistic and reasonable. The same shall be vetted by the Supervision Consultant.
4. **Resource-based:** Manpower, Machinery, Equipment and required financial inputs shall be mapped against each activity. The same shall be verified by the Supervision Consultant in its MPRs.





**Appendix-2**

Indicative Attributes of the **Hindrance Register**:

1. **Baseline Hindrance Register** shall be prepared on the day of signing the Joint Memorandum.
2. The same shall be **maintained at the Site** to record the following:
  - a) Removal of the existing hindrances.
  - b) Development of any encumbrance.
  - c) New hindrance due to public resistance/COS/Court Case etc.
3. These details **should be jointly agreed and signed-off**, duly mentioning the date of inclusions and removal.
4. Further, any updation shall be supported through a **geo-referenced video with date and time stamp**.

*The Baseline Work Programme shall be updated every month as per the updated Hindrance Register (Impacted Programme on Project Management Tools) to assess its impact on the Critical Path and the overall Project Completion Schedule and shall be included in the MPR.*



**Appendix-3****(i) Checklist for ensuring AE/IEs obligations before certification of Monthly Consultancy Bills of AE/IE:**

S N	Item
1	Pendency of EOT Proposal by more than <b>15 days</b>
2	Pendency of COS Proposal by more than <b>15 days</b>
3	Contractor's invoice Pendency for more than <b>10 days</b> (For provisional payment of 90% of the amount)
4	Contractor's invoice Pendency for more than <b>15 days</b> (For Full amount determined in the IPC)
5	Pendency in Design Reviews: <b>30 days</b> for Major Bridge and Structures. <b>15 days</b> for other works from first submission. <b>10 days</b> from submission of revised Drawings.
6	Maintenance obligations (As per Maintenance App): Pendency of more than <b>30 days</b> for conducting monthly maintenance inspections. Pendency of more than <b>3 days</b> in the review of ATR by Contractor.
7	Delay in submission of Monthly MPR by more than <b>7 days</b> .
8	Pendency in conducting NSV-based road condition survey by more than <b>30 days</b> .
9	Pendency in review of equipment based surveys and uploading on Data Lake Ram cell as per prescribed Policy Circulars.

\* For any deficiency in submission for justified reasons may be asked for clarification within prescribed time limit in that case pendency may not be considered

**(ii) Checklist for Notification of Delay Event by Contractor:**

S N	Item
<b>1</b>	<b>Details of Event</b>
a	Start date of the Event
b	Actual/anticipated date of closure of the Event
<b>2</b>	<b>Details of the works affected</b>
a	Type of affected work (Highway/Structures/Road Furniture/Other Works)
b	Start/End Chainage
c	Value of affected work
<b>3</b>	<b>Nature of Event</b>
a	One-time effect or continual
b	Warrant of Damages from Authority
<b>4</b>	<b>Possible Impact on Project Completion Schedule and on Critical Path</b>
<b>5</b>	<b>List of Manpower and Machinery</b>
a	Duly supported by geotagged photographs of Plant & Machinery



S N	Item
b	Arial photographs of the contractor's camp
c	Copy of muster rolls
6	Contractor's Plan to mitigate the effects

## (iii) Checklist for COS Notice by AE/IE or Authority:

S N	Item
1	Details of Event
a	Description of item
b	Positive/ Negative COS
c	Chainage affected by the COS
d	Reason of COS provided

## (iv) Checklist for EOT Proposal submission:

<b>Antecedents:</b>	
<b>Delay in Handing Over of Land</b>	
1	PD to hand over all the documents (pertaining to land) to AE/IE immediately after their mobilization.
2	Joint Memorandum to contain the list of stretches handed over and the equitable list of workable lengths duly considering the offsets of the hindrances from the centerline and construction zone as per DPR Drawings.
3	Contractor shall submit a resource-backed (Man, Machinery and required financial inputs) PERT/CPM based work programme with micro-level programming for every 2/5 km stretch (with embedded timeline and layout of the Hindrances/ Utilities). The soft copy of the software file shall be submitted.
<b>Delay in Tree Cutting Permission</b>	
The number of trees to be removed/ shifted shall be mentioned with offsets from the proposed centerline in Schedule-B of the CA.	
(To be incorporated in the DPR Consultant Scope)	
<b>Delay in Utility Shifting</b>	
The number of utilities to be removed/shifted shall be mentioned with offsets from the proposed centerline in Schedule-B of the CA and separate locations of all utilities required to be shifted shall be separately shown in approved alignment plan.	
(To be incorporated in the DPR Consultant Scope)	

S N	Item
<b>Primary mandates on the proposal submission:</b>	
1	Contractual clause considered for EOT entitlement (Mention the Clauses)
2	Has the Contractor/ Concessionaire notified the delay event on time? (15 Days)
3	Status and Ageing of previous EOT entitlement
4	Impacted Programme incorporating the Delay Events.

S N	Item
5	Justification on why the effect of the Event on the Project Completion Schedule cannot be mitigated by using PERT/CPM techniques through Crashing and using Float.
6	Revised Work Programme for balance works / COS works (in case the EOT is claimed due to COS works).
7	Submission of an updated programme with impact of Hindrance (Actual progress updated on approved work programme)
8	Has the Contractor/ Concessionaire submitted the EOT claims expeditiously with detailed delay analysis to determine the allowable interim/ final time extension (as per clause 10.5.4 of CA). NHAI/ Policy Guidelines/ Civil Works/ 2019 No.9.2.25/2019 dated 24th July, 2019
9	List of specific activities which has been impacted due to the delay event?
10	Has the works commenced on the affected stretches with dates attached as per the work programme.
11	Has the price escalation as per Clause 19 .11 of CA been restricted on the value of works in the effective length of reaches delayed by the Contractor (i.e., on Rs. A Cr.) and allowed only on the value of works in the effective length of reaches delayed due to the Authority
12	Has the Contractor submitted the details of Cost Claims relating to EOT till that date
13	Does the delay involved has a time overlaps.
14	Calculation of Damages/ Escalation/Prolongation and Other Costs.
<b>Delay in Handing Over of Land</b>	
1	Status of Land Handed over as on Appointed Date as per Memorandum
	Total length
	Available length for construction
	affected/hindered length
2	Status of Affected length
	Delay attributable to Authority
	Delay attributable to concerned Authority
	Delay attributable to the Contractor
3	Delay impact
	Total length affected
	Total delay in affected length
	Impact mitigated/ mitigation measures
	Net delay in affected length
	Net delay in Project completion
4	Supporting documents
	Status of land in Joint Memorandum
5	Has the delay in handing over of land & its effects been a part of MPR submitted by Contractor/ Concessionaire.
6	Worksheet for Delay in Handing Over of Land as per NHAI Policy Circular no. NHAI/IT/29/2020/2 dated 06.01.2020.
7	Is the Strip chart depicting the affected stretches due to Encumbrance/Hindrances with ROW Offsets attached in the proposal
8	Is the affected stretches due to Encumbrance/ Hindrances and or location of Religious Structures where there is delay in relocation delaying the milestone or schedule completion date



S N	Item
9	When has the handing over schedule of the Balance Land been provided to the Contractor/ Concessionaire along with dates.
10	Has the works commenced on the affected stretches with dates attached as per the work programme.
11	Has the works on all parts of RoW granted within 90 days of Appointed Date or as provided in Schedule-A been completed before the Scheduled Completion Date. NHAI/ Policy Guidelines/ Civil Works/ 2019 No.9.2.25/2019 dated 24th July, 2019 (Only for the final milestone)
12	Is the delay or the hindrance on land made available on the Appointed Date (AD) through Joint Memorandum. NHAI/ Policy Guidelines/ Civil Works/ 2019 No.9.2.25/2019 dated 24th July, 2019
13	Is the delay or the hindrance on land made available on the Appointed Date (AD) through Joint Memorandum having evidence of delay attributable to the Authority. NHAI/ Policy Guidelines/ Civil Works/ 2019 No.9.2.25/2019 dated 24th July, 2019
14	Has the damages for delay in handing over the Site in Rs/ day per m been calculated as $.05 * 1/L * 1/N$ subject to maximum of 10% of Contract Price where L=Length of project, N= Completion period in days as per clause 8.3.1 of the CA
15	Options for mitigation measures by prioritizing/ deprioritizing other unaffected stretches in the work programme, duly taking into account the actual/ anticipated dates of handing over.
16	Impact of the affected stretches on the Critical Path.
<b>Delay in Tree Cutting Permission</b>	
1	Status of Trees as on Appointed Date
	Total no of trees identified
	Status of Tree cutting permission/Estimate
	Trees already cut as on the Appointed Date
	Balance Trees as on date
2	Reason for delay in tree cutting
	Delay attributable to Authority
	Delay attributable to the concerned Authority
	Delay attributable to the Contractor
3	Delay impact
	Total length affected
	Total delay in affected length
	Impact mitigated/ mitigation measures
	Net delay in affected length
	Net delay in Project completion
4	Supporting documents
	Status of Trees in Joint Memorandum
5	Contractor's intimation of additional Trees (beyond the list provided in Schedule-B) with response from AE and Authority.
6	Contractor's request and follow-up correspondences for obtaining permission from the concerned Authority. (To evaluate diligence in initiation and follow-up)
7	Correspondence on Contractor's request for assistance from Authority and documented Authority's assistance.
8	Correspondence regarding approval of the Tree Cutting Estimate between the Contractor and the Authority.

S N	Item
9	Strip Chart depicting the affected stretches with offsets of Trees from the proposed centerline.
10	Impact of the affected stretches on the Critical Path.
11	Options for mitigation measures by prioritizing/deprioritizing other unaffected stretches in the work programme, duly taking into account the actual/anticipated dates of clearance.
<b>Delay in Utility Shifting</b>	
1	Status of Utilities as on Appointed Date
	Total utilities identified
	Status of utilities permission/Estimate
	utilities shifted as on the Appointed Date
	Balance Utilities as on date
2	Reason for delay in utility shifting
	Delay attributable to Authority
	Delay attributable to the concerned Authority
	Delay attributable to the Contractor
3	Delay impact
	Total length affected
	Total delay in affected length
	Impact mitigated/ mitigation measures
	Net delay in affected length
	Net delay in Project completion
4	Supporting documents
	Status of Utilities in Joint Memorandum
5	Contractor's intimation of additional Utilities obstructing the construction (beyond the list provided in Schedule-B) with response from AE and Authority.
6	Contractor's request and follow-up correspondences for obtaining permission from the concerned Authority, including approval of the Estimates. (To evaluate diligence in initiation and follow-up)
7	Correspondence on Contractor's request for assistance from Authority and documented Authority's assistance.
8	Correspondence regarding approval of the Utility Shifting Estimate between the Contractor and the Authority.
9	Strip Chart depicting the affected stretches with offsets of trees from the proposed centerline.
10	Impact of the affected stretches on the Critical Path.
11	Options for mitigation measures by prioritizing/deprioritizing other unaffected stretches in the work programme, duly taking into account the actual/anticipated dates of clearance.
<b>Delay in Forest / Wildlife / CRZ and other approvals</b>	
1	Status of Forest / Wildlife / CRZ and other approvals as on Appointed Date
	Total Forest / Wildlife / CRZ and other approvals identified
	Status of permission Forest / Wildlife / CRZ and other approvals
	Balance Forest / Wildlife / CRZ and other approvals as on date
2	Supporting documents
	Status of Forest / Wildlife / CRZ and other approvals in Joint Memorandum
	Actual Status of Forest / Wildlife / CRZ and other approvals at site



S N	Item
3	Contractor's intimation of pending clearances obstructing the construction with response from AE and Authority.
4	Contractor's request and follow-up correspondences for obtaining permission from the concerned Authority, including approval of the Estimates. (To evaluate diligence in initiation and follow-up)
5	Strip Chart depicting the affected stretches with offsets of trees from the proposed centerline.
6	Impact of the affected stretches on the Critical Path.
7	Options for mitigation measures by prioritizing/deprioritizing other unaffected stretches in the work programme, duly taking into account the actual/anticipated dates of clearance.
<b>Delay in approval of GADs</b>	
1	Status of GAD approval as on Appointed Date
	Total length affected by GAD
	GAD approved by
2	Reason for delay in GAD approval
	Delay attributable to Authority
	Delay attributable to the concerned Authority
	Delay attributable to the Contractor
3	Delay impact
	Total length affected
	Total delay in affected length
	Impact mitigated/ mitigation measures
	Net delay in affected length
	Net delay in Project completion
4	Supporting documents
5	Authority's correspondences with the Railway Authority for submission and approval of the GAD.
6	Date of approval letter from Railway Authority.
7	Correspondence on drawings and designs submitted by Contractor to NHAI for approval & further submission.
8	Impacted program for individual ROBs and affect on the Critical Path.
9	Options for mitigation measures by prioritizing/deprioritizing other unaffected stretches in the work programme, duly taking into account the actual/anticipated dates of AD approval.
10	Revised Durations required for completion of the individual ROBs.
<b>Force Majeure Events (Non-Political, Indirect Political, Political)</b>	
1	Notification by Contractor on the occurrence of the Event. (To assess timely notification as per EPC Clause no. 21.5 and HAM Clause no.28.5)
2	Is the event a Non-Political Event
3	Is the event an Indirect Political Event
4	Is the event a Political Event
5	Details of the Event
6	Date of Occurrence
7	Date of Intimation
8	Its Effect on Construction Progress
9	Affected length

S N	Item
10	Anticipated/Actual duration of the event
11	Impact of the affected stretches on the Critical Path.
12	Any other information relevant to the Affected Party's claim.

## (v) Checklist for COS Proposal submission:

S N	Item
<b>Primary mandates on the proposal submission</b>	
1	Date of Identification
2	Nos. of days from AD when the COS has been identified
3	Reason for COS
4	Whether proposed facility as COS was part of DPR / Feasibility Report
4	Chainage affected by the COS
5	Time analysis for the completion of COS Item
6	Number of days by when the COS would be completed from in-principle approval date including detailed breakup
7	Extension of Time if required because of COS Item.
8	Any land acquisition required
9	Cost of additional LA
<b>Additional work as per Site requirements like (SVUP, LVUP, VUP, PUP, Culvert, Drain, Interchange)</b>	
1	Comparison of design of COS item Vis a Vis originally approved item.
2	Detailed design of COS Item
3	Detailed Quantity Breakup
4	Rate Analysis as per the SOR on Base Date duly adjusted against the WPI. The rates of the Items not available in SOR shall be derived based on the MoRT&H Standard Data book and prevailing Market Rates.
5	Applicable SOR
6	Publication date of SOR
7	Escalation Applicable on SOR
8	Applicable SDB
9	Tender premium/discount on Estimated cost
10	Cost of COS Item
11	The additional land has been acquired or not
<b>Additional work as per Site requirements like (Service road, Slip road)</b>	
1	Comparison of design of COS item Vis a Vis originally approved item.
2	Detailed design of COS Item
3	Has acceleration or deceleration length been provided



S N	Item
4	Has the extra quantity of acceleration or deceleration length has not been added in the BOQ.
5	Detailed Quantity Breakup
6	Rate Analysis as per the SOR on Base Date duly adjusted against the WPI. The rates of the Items not available in SOR shall be derived based on MoRT&H Standard Data book and prevailing Market Rates.
7	Applicable SOR
8	Publication date of SOR
9	Escalation Applicable on SOR
10	Applicable SDB
11	Tender premium/discount on Estimated cost
12	Cost of COS Item
13	The additional land has been acquired or not.
<b>Additional work as per Site requirements like (At grade intersections)</b>	
1	Comparison of design of COS item Vis a Vis originally approved item.
2	Detailed design of COS Item
3	Has acceleration or deceleration length been provided
4	Has the extra quantity of acceleration or deceleration length has not been added in the BOQ.
5	Detailed Quantity Breakup
6	Rate Analysis as per the SOR on Base Date duly adjusted against the WPI. The rates of the Items not available in SOR shall be derived based on MoRT&H Standard Data book and prevailing Market Rates.
7	Applicable SOR
8	Publication date of SOR
9	Escalation Applicable on SOR
10	Applicable SDB
11	Tender premium/discount on Estimated cost
12	Cost of COS Item
13	The additional land has been acquired or not.
<b>Additional work as per Site requirements like (ROB, RUB)</b>	
1	Detailed design of COS Item
2	Has acceleration or deceleration length been provided
3	Has the extra quantity of acceleration or deceleration length has not been added in the BOQ.
4	Detailed Quantity Breakup

S N	Item
5	Rate Analysis as per the SOR on Base Date duly adjusted against the WPI. The rates of the Items not available in SOR shall be derived based on MoRT&H Standard Data book and prevailing Market Rates.
6	Applicable SOR
7	Publication date of SOR
8	Escalation Applicable on SOR
9	Applicable SDB
10	Tender premium/discount on Estimated cost
11	Cost of COS Item
12	The additional land has been acquired or not.
<b>Additional work as per Land acquisitional requirements like Bypass</b>	
1	Detailed design of COS Item
2	Detailed Quantity Breakup
3	Rate Analysis as per the SOR on Base Date duly adjusted against the WPI. The rates of the Items not available in SOR shall be derived based on MoRT&H Standard Data book and prevailing Market Rates.
4	Applicable SOR
5	Publication date of SOR
6	Escalation Applicable on SOR
7	Applicable SDB
8	Tender premium/discount on Estimated cost
9	Cost of COS Item
10	The additional land has been acquired or not
<b>Additional work as per Site requirements like (Highway Lighting)</b>	
1	Comparison of design of COS item Vis a Vis originally approved item.
2	Detailed design of COS Item
3	Detailed Quantity Breakup
4	Rate Analysis as per the SOR on Base Date duly adjusted against the WPI. The rates of the Items not available in SOR shall be derived based on MoRT&H Standard Data book and prevailing Market Rates.
5	Applicable SOR
6	Publication date of SOR
7	Escalation Applicable on SOR
8	Applicable SDB
9	Tender premium/discount on Estimated cost
10	Cost of COS Item



S N	Item
11	The additional land has been acquired or not
Additional work as per acquisitional utility shifting requirements like Extra High Tension lines, HT/ LT lines, Electric poles, Transformer, TNS, Water/ Sewer pipe lines, Gas Oil pipeline crossing, TP & OFC Crossings	
1	Has it been a part of Schedule B of the Contract
2	Has the detailed estimates of the item shifting been provided or not.
3	Is the land available for the utility shifted area

7. This issues with the approval of Competent Authority.

  
 10/01/24  
 (Sanjay Kumar Patel)  
 General Manager (Coord.)

To:

All Officers of NHAI HQ/ ROs/ PIUs/ CMUs/ Site Offices

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