



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/Administration/ 2024

Policy Circular No. 1.3.1.37/2024 dated 06th August, 2024

{Decision taken on E-Office File No. ADMIN-11014/6/2024-O/o GM (HR/Admin-III) (Comp. No. 252325)}

Sub: Policy Guidelines for “External Professionals in Information Technology - Project Management Unit (IT- PMU)”- reg.

1. Background:

- 1.1 Chairman, NHAI approved the proposal to constitute IT-PMU in Feb 2022 to take up upcoming challenges in tapping the potential of the NHAI's IT Systems and to ensure deeper adoption of the IT systems in the Organization.
- 1.2 Initially, a team of 05 Joint Advisors was envisaged to work as Product Managers, Data Scientists and GIS experts to provide Technical, Implementation, Operational, Integration and Procurement Support to NHAI's core IT Division.
- 1.3 As part of the Team, 02 Joint Advisors (GIS) in the first round of advertisement while 02 Joint Advisors (Product Manager) and 02 Joint Advisors (Data Scientist) were on boarded in the second round by Dec 2022.
- 1.4 Between Dec 2022 and June 2022, 01 Joint Advisor (GIS) was transferred to LA Division while 01 Joint Advisor (Data Scientist) resigned.
- 1.5 Subsequently, in June 2023, another advertisement was floated seeking 01 Joint Advisor (GIS), 01 Joint Advisor (Data Scientist) and 03 Joint Advisors (Product Manager) considering the increased scope of work in Data Lake, NHAI One, Rajmarg Yatra App, etc.
- 1.6 After 03 rounds of advertisement with immense time and resources spent, only 05 Joint Advisors are presently part of the Team.
- 1.7 Considering the poor accretion of manpower observed since the inception of the Team at NHAI, a need has been felt to redefine the existing Terms of Reference that, if adopted, could serve as incentives to retain manpower as well as attract experienced market Professionals.
- 1.8 Further, due to the evolving and dynamic scope of work prevalent in the IT Division, the Team and its strengthening is the need of the hour. The proposal is, therefore, based on a horizontal & vertical expansion model such that seamless transfer of duties with backups at every level would help in fulfilling the mandate defined for the Team with minimal lags.
- 1.9 At present, the following reasons pose a challenge in strengthening of the existing Team engaged to execute the mandate defined by NHAI:
 - a. Key differentiator: What differentiates the Joint Advisors in IT-PMU as compared with equivalents in other Tech. divisions is the fact that the latter are primarily retired officers (age > 60 yrs), whereas the incumbents in IT-PMU are skilled professionals in the age group of 25-35 years and presently working in IT industry, who expect reasonably longer tenure with career growth opportunities to leave their existing assignments and join NHAI.

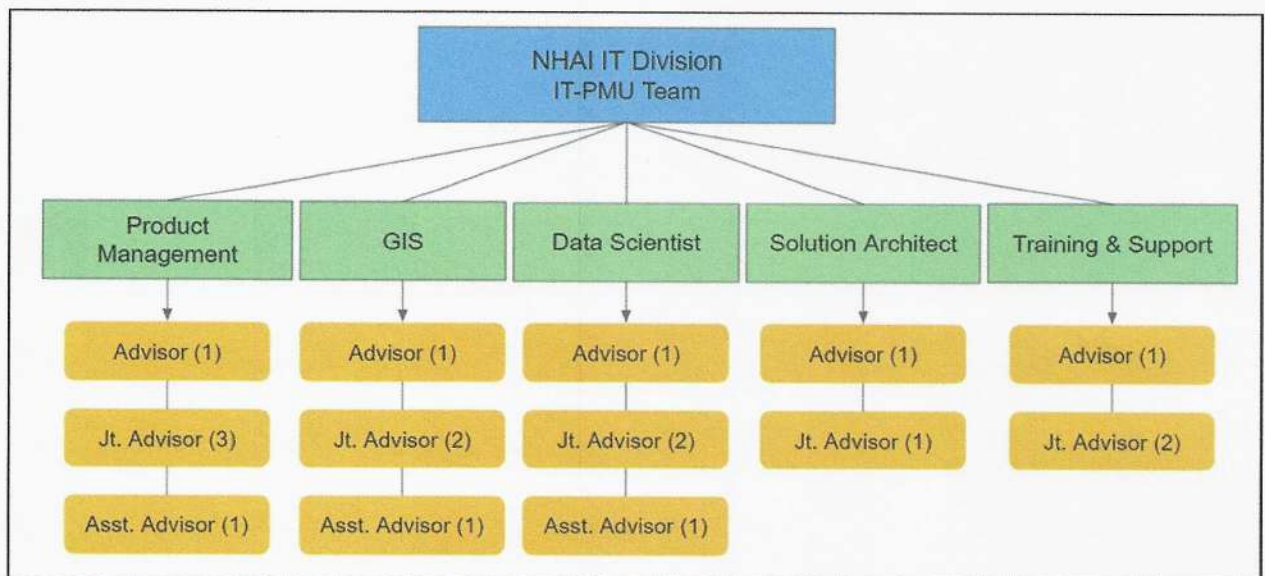
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- b. Engagement process & Outreach: The typical engagement process adopted at NHAI, especially advertising has limited reach to the targeted market professionals.
- c. Emoluments: NHAI prescribes fixed emoluments with increment capped at only 5% per annum which does not match at all with standard industry practices.
- d. Professional growth and tenure: Candidates do not find professional career growth at NHAI due to lack of provisions for promotions/higher positions at NHAI coupled with the lack of job security due to fixed contractual engagement of only 03 years subject to annual contract renewal.
- e. Other benefits including flexibility: No provision for female EPs for standard incentives extended by Government of India (e.g., Maternity Leave/Benefit, etc.). Also, there is no provision for leave for undertaking study/course, work from home, etc. which is standard industry practice in IT Sector.

2. Considering the above, modified Policy Guidelines as detailed hereinafter, is adopted for EPs in the IT-PMU team to attract the right talent and retain them for a reasonable tenure so that emerging mandate (specially entrusted by MoRTH/NHIDCL) is effectively fulfilled.

3.1 Team Structure:

New and refined roles to be created for the facilitation of mandate with a vertical hierarchy-based team structure based on experience to provide long term career growth and scope for promotions.



3.2 Advertisement Outreach & Engagement Process:

- a. Better outreach / publicity on leading job portals such as LinkedIn (including paid channels), etc. in addition to NHAI's website.
- b. NHAI can take subject experts in the screening & selection committees from Digital India Corporation (DIC) to help NHAI in key areas of expertise. As NHAI has signed MoU with DIC, we may seek DIC's support in focused technical matters.

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3.3 The Terms of Reference and Eligibility Conditions for engagement of EPs in IT-PMU through open marked are detailed in **Annexure-I**.

3.4 Remuneration Structure:

3.4.1 Existing Policy Guidelines No.1.3.1.12/2017 dated 21.06.2017 for "EPs engaged from the Open Market" prescribes Remuneration amount equal to what an officer gets from the Government at the appropriate level including the Basic Pay + DA + HRA + Transport Allowance under the 7th Pay Commission.

3.4.2 Accordingly, remuneration range has been proposed for the three categories of EPs proposed viz. Advisor, Joint Advisor and Assistant Advisor as detailed herein below. The detailed calculation is placed at **Annexure-II**:-

Sl. No.	Position	Monthly Remuneration Bands (Rs.)	Remarks
(i)	Advisor	Rs.2,30,000 - 2,76,000/-	Remuneration shall be moderated keeping in view the remuneration such person is getting in the open market in his / her last / present assignment. He / She may be offered an increase of 10% to 20% of his emoluments drawn at the time of engagement.
(ii)	Jt. Advisor	Rs.1,50,000 - 1,81,000/-	
(iii)	Asstt Advisor	Rs.1,10,000 - 1,32,000/-	

3.4.3 The remuneration shall be decided by a Remuneration Committee comprising the following:-

- a. CGM (Admn.)
- b. CGM (Fin.)
- c. CGM (IT)

3.4.4 The Remuneration Committee may devise its own mechanism to arrive at the appropriate remuneration and may seek requisite documents from the candidate, if required. The recommendations of the Remuneration Committee shall be approved by the Member / Chairman, as the case may be. The Remuneration Cap may be relaxed for exceptional candidates with the approval on the Executive Committee (EC) on case to case basis.

3.4.5 In case of requirement of travel outside HQ for official work, the entitlement of EPs for the purpose of TA & DA, etc. shall be as per Policy Circular No.1.3.1.17 dated 26.06.2018 (as amended from time to time).

3.5 The detailed terms & conditions specific to EPs of IT-PMU are at **Annexure-III**. Other terms and conditions to be incorporated are summarized as under:-

3.5.1 Performance Appraisal and Increment:

- a. Annual Performance Appraisal to be conducted by the Division Head.
- b. Schedule of Performance Appraisal may be conducted once in a year in 02 cycles, viz. 01st January and 01st July each year.
- c. Eligibility to qualify for a particular cycle will depend on minimum 06 months of continuous service preceding the cycle.

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- d. The performance appraisal will be linked with Key Performance Indicators (KPI) to be decided in advance with the approval of the Member concerned.
- e. Annual increment post performance appraisal @ 10% of the previous year's remuneration w.e.f. either 01st January or 01st July (only once in a year), as the case may be, to be approved by the Competent Authority. This shall also be applicable to Joint Advisors under IT-PMU engaged as on date. However, a fresh contract shall be executed with them for revised remuneration with KPIs.

3.5.2 Professional development & Tenure:

A. Provision for professional development:

- (i) **Re-engagement as Joint Advisor** - On completion of 03 years continuous and satisfactory service as Assistant Advisor, the EP may be considered for fresh engagement as Joint Advisor, after following due process of engagement, as per Guidelines and procedure for engaging EP/YP in NHAI Policy Circular No.1.3.1.12/2017 dated 21.06.2017 (as amended from time to time).
- (ii) **Re-engagement as Advisor** - After completion of 04 years continuous and satisfactory service tenure as Joint Advisor, the EP may be considered for fresh engagement as Advisor, after following due process of engagement, as per Guidelines and procedure for engaging EP/YP in NHAI Policy Circular No.1.3.1.12/2017 dated 21.06.2017 (as amended from time to time).

- B. The tenure (including extension of tenure of the EP in IT-PMU) shall be as per Guidelines and procedure for engaging EP/YP in NHAI Policy Circular No.1.3.1.12/2017 dated 21.06.2017 (as amended from time to time).

3.5.3 Other Benefits, including Flexibility:

- a. The leave without pay for the purpose of professional course / study / training for a maximum period of 03 months during the tenure of 03 years may be provided to EPs in IT-PMU.
- b. Work from home on case-to-case basis for maximum up to 30 days in a year (single or multiple instances) may be provided to EPs in IT-PMU, subject to the condition that Division Head certifies that the EP had performed Official Work during Work From Home. This would enable NHAI to prevent attrition amongst EPs in IT-PMU and is also as per the extant industry practice.
- c. To prevent the confidentiality of data of NHAI, Laptops (on returnable basis) may be provided to EPs of the IT-PMU, which shall be procured by IT Division of NHAI. Any loss of laptop by EP should be recovered from the EP. IT Division shall devise the adequate checks and safeguards for safety & security of the Asset & Data.
- d. EPs in IT-PMU shall be entitled to 08 days paid casual leave and 15 days paid sick leave in a calendar year. No un-availed leave will be allowed to be carried forward to the next year. They shall not be entitled to any other kind of leave.
- e. The Maternity Leave / Benefit to female EPs may be provided as per the Maternity Benefit Act, 1961 (as amended from time to time).

3.5.4 Measures to safeguard NHAI's interests:

In addition to the above liberalizations/incentives, NHAI shall also consider the following in order to safeguard its interests:

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- a. The applicant selected by NHAI for IT-PMU should not decline the offer of engagement. In case He / She declines the offer of engagement, His/Her candidature shall not be considered for any further engagement by NHAI for a period of two years from the date of cancellation of offer of engagement.
 - b. Provision of a reserve list of shortlisted candidates in decreasing order of score who may be approached, if the selected candidate declines to join or leaves NHAI before 06 months of joining.
 - c. Provision of lock-in period: To safeguard the interests of NHAI, it is proposed to include a condition of lock-in period in the Contract Agreement to be executed with EPs in IT-PMU, in consultation with Legal Division:-
 - (i) **For Advisors:** 02 years lock-in period (excluding notice period) with provision of liability of payment of Rs 5.00 Lakhs in case of premature resignation by EP.
 - (ii) **For Joint Advisors:** 02 years lock-in period (excluding notice period) with provision of liability of payment of Rs 3.00 Lakhs in case of premature resignation by EP.
 - (iii) **For Assistant Advisors:** 02 years lock-in period (excluding notice period) with provision of liability of payment of Rs 2.00 Lakhs in case of premature resignation by EP.
 - d. The engagement of an EP in IT-PMU can be terminated by either party by giving 60 days' notice in advance or payment of minimum of 02 month's remuneration by either side in lieu of 60 days' notice period, as the case may be and the contract would terminate automatically at the end of such period.
 - e. If the performance of a candidate is not up to the mark, His/Her contract may be terminated by NHAI giving 02 months' notice.
4. The terms & conditions, which are not specifically mentioned hereinabove shall be governed as per Guidelines and Procedure for engaging EP/YP in NHAI Policy Circular No.1.3.1.12/2017 dated 21.06.2017 (as amended from time to time). Any relaxation in the Provisions of the Policy shall be made with the approval of the Executive Committee (EC).
5. This issues with the approval of Competent Authority.

Encl.: As stated above


(CS. Sanjay Kumar Patel)
General Manager (Coord.)

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

Copy to:

1. Hindi Division for translation in Hindi.
2. Library for hosting the circular on library site.
3. Web Admin for circulation.

TERMS OF REFERENCE AND ELIGIBILITY CONDITIONS FOR ENGAGEMENT OF EXTERNAL PROFESSIONALS IN IT-PMU THROUGH OPEN MARKET

Position	Advisor (Product Management)
No. of Positions	1
Posting	IT-PMU, IT Division, NHAI HQ
Engagement	On Full-Time Contract basis initially for a period of 02 years, which may be extended, subject to performance appraisal, with the approval of the Competent Authority as per EP/YP Policy of NHAI.
Basic Qualification	Bachelor's degree in Science / Technology / Engineering / Business Administration or related fields from a recognized university/ institute
Desirable Qualification	Master's degree in Science / Technology / Engineering / Business Administration or related fields from a recognized university/ institute
Basic Experience	<p>(a) Minimum 08 years of product management experience including managing the KPIs, Requirements, UX and direct coordination with technical teams and business stakeholders.</p> <p>(b) Should have experience in SDLC life cycles (Scrum or Agile) and task management software's Jira or Github preferred.</p> <p>(c) Experience with product level data analytics, user-engagement, feedback, setting up KPIs etc.</p> <p>(d) Demonstrated experience in designed work-flows, mock-ups and re-engineering of processes using IT.</p> <p>(e) Previous experience as team lead in software development is preferred</p>
Specific Experience (if any)	To be decided by IT Division on case-to-case basis as per emerging need
Proposed Responsibilities	<p>(a) Support NHAI in management of its core IT Systems (Data Lake and other supplementary or integrated systems). Understand the business requirements and provide technical inputs wherever required.</p> <p>(b) Designing framework, monitor development of IT enabled products/services such as:</p> <ol style="list-style-type: none"> Incident Response Management System for highway emergencies Rajmarg Yatra App- Citizen interface for NH related feedback and complaints for the highway users GIS based Portal of NH projects for Planning and Monitoring <p>(c) Support NHAI in its digitization journey by re-engineering the existing offline processes and making them online and seamless. Prepare road maps, roll-out plans etc for use of emerging technologies and BI to strengthen decision support system.</p> <p>(d) Conduct user interviews and surveys to gather bottom-up feedback / end user expectations on the functioning of NHAI's IT systems / Mobile apps. Support NHAI to design and roll out systems on Agile model & prioritize SDLC for such initiatives.</p> <p>(e) Finalize functional requirements, UI/UX wireframes, workflows for ongoing and new requirements and check its effectiveness.</p> <p>(f) Liaison, with IT vendors and downstream NHAI counterparts to provide supervisory services and help NHAI in contract management with vendors. Monitoring the use of NHAI IT systems and preparing KPIs for vendor management.</p> <p>(g) Review and approve software artefacts to ensure it meet customer, business and compliance requirements.</p> <p>(h) Co-ordination with high level authorities and stakeholder of other organizations for faster delivery of solutions and resolutions.</p> <p>(i) Any other responsibility as assigned by NHAI during the tenure.</p>
Remuneration	At par with industry standards within the Remuneration Band



Position	Joint Advisor (Product Management)
No. of Positions	2
Posting	IT-PMU, IT Division, NHAI HQ
Engagement	On Full-Time Contract basis initially for a period of 02 years, which may be extended, subject to performance appraisal, with the approval of the Competent Authority as per EP/YP Policy of NHAI.
Basic Qualification	Bachelor's degree in Science / Technology / Engineering / Business Administration or related fields from a recognized university/institute
Desirable Qualification	Master's Degree in Science / Technology / Engineering / Business Administration or related fields from a recognized university/institute
Age Limit	Not exceeding 48 years as on prescribed last date of receipt of online applications.
Desirable Experience	<p>(a) Minimum 05 years of product management experience including managing the KPIs, Requirements, UX and direct coordination with technical teams and business stakeholders.</p> <p>(b) Should have experience in SDLC life cycles (Scrum or Agile) and task management software's Jira or Github preferred.</p> <p>(c) Experience with product level data analytics, user-engagement, feedback, setting up KPIs etc.</p> <p>(d) Demonstrated experience in designed work-flows, mock-ups and re-engineering of processes using IT.</p> <p>(e) Previous experience as team lead in software development is preferred</p>
Specific Experience (if any)	To be decided by IT Division on case-to-case basis as per emerging need
Proposed Responsibilities	<p>(a) Support NHAI in management of its core IT Systems (Data Lake and other supplementary or integrated systems). Understand the business requirements and provide technical inputs wherever required.</p> <p>(b) Designing framework, monitor development of IT enabled products / services such as:</p> <ol style="list-style-type: none"> i. Incident Response Management System for highway emergencies ii. Rajmarg Yatra App- Citizen interface for NH related feedback and complaints for the highway users iii. GIS based Portal of NH projects for Planning and Monitoring <p>(c) Support NHAI in its digitization journey by re-engineering the existing offline processes and making them online and seamless. Prepare road maps, roll-out plans etc for use of emerging technologies and BI to strengthen decision support system.</p> <p>(d) Conduct user interviews and surveys to gather bottom-up feedback / end user expectations on the functioning of NHAI's IT systems / Mobile apps. Support NHAI to design and roll out systems on Agile model & prioritize SDLC for such initiatives.</p> <p>(e) Finalize functional requirements, UI/UX wireframes, workflows for ongoing and new requirements and check its effectiveness.</p> <p>(f) Liaison, with IT vendors and downstream NHAI counterparts to provide supervisory services and help NHAI in contract management with vendors. Monitoring the use of NHAI IT systems and preparing KPIs for vendor management.</p> <p>(g) Review and approve software artefacts to ensure it meet customer, business and compliance requirements.</p> <p>(h) Co-ordination with high level authorities and stakeholder of other organizations for faster delivery of solutions and resolutions.</p> <p>(i) Any other responsibility as assigned by NHAI during the tenure.</p>
Remuneration	At par with industry standards within the Remuneration Band

Position	Assistant Advisor (Product Management)
No. of Positions	1
Posting	IT-PMU, IT Division, NHAI HQ
Engagement	On Full-Time Contract basis initially for a period of 02 years, which may be extended, subject to performance appraisal, with the approval of the Competent Authority as per EP/YP Policy of NHAI.
Basic Qualification	Bachelor's degree in Science / Technology / Engineering / Business Administration or related fields from a recognized university/institute
Desirable Qualification	Master's Degree in Science / Technology / Engineering / Business Administration or related fields from a recognized university/institute
Age Limit	Not exceeding 35 years as on prescribed last date of receipt of online applications.
Desirable Experience	<p>(a) Minimum 03 years experience of product management experience including managing the KPIs, Requirements, UX and direct coordination with technical teams and business stakeholders.</p> <p>(b) Should have experience in SDLC life cycles (Scrum or Agile) and task management software's Jira or Github preferred.</p> <p>(c) Experience with product level data analytics, user-engagement, feedback, setting up KPIs etc.</p> <p>(d) Demonstrated experience in designed work-flows, mock-ups and re-engineering of processes using IT.</p> <p>(e) Previous experience as team lead in software development is preferred</p>
Specific Experience (if any)	To be decided by IT Division on case-to-case basis as per emerging need
Proposed Responsibilities	<p>(a) Support NHAI in management of its core IT Systems (Data Lake and other supplementary or integrated systems). Understand the business requirements and provide technical inputs wherever required.</p> <p>(b) Designing framework, monitor development of IT enabled products / services such as:</p> <ol style="list-style-type: none"> i. Incident Response Management System for highway emergencies ii. Rajmarg Yatra App- Citizen interface for NH related feedback and complaints for the highway users iii. GIS based Portal of NH projects for Planning and Monitoring <p>(c) Support NHAI in its digitization journey by re-engineering the existing offline processes and making them online and seamless. Prepare road maps, roll-out plans etc for use of emerging technologies and BI to strengthen decision support system.</p> <p>(d) Conduct user interviews and surveys to gather bottom-up feedback / end user expectations on the functioning of NHAI's IT systems / Mobile apps. Support NHAI to design and roll out systems on Agile model & prioritize SDLC for such initiatives.</p> <p>(e) Finalize functional requirements, UI/UX wireframes, workflows for ongoing and new requirements and check its effectiveness.</p> <p>(f) Liaison, with IT vendors and downstream NHAI counterparts to provide supervisory services and help NHAI in contract management with vendors. Monitoring the use of NHAI IT systems and preparing KPIs for vendor management.</p> <p>(g) Review and approve software artefacts to ensure it meet customer, business and compliance requirements.</p> <p>(h) Co-ordination with high level authorities and stakeholder of other organizations for faster delivery of solutions and resolutions.</p> <p>(i) Any other responsibility as assigned by NHAI during the tenure.</p>
Remuneration	At par with industry standards within the Remuneration Band

Position	Advisor (Data Scientist)
No. of Positions	1
Posting	IT-PMU, IT Division, NHAI HQ
Engagement	On Full-Time Contract basis initially for a period of 02 years, which may be extended, subject to performance appraisal, with the approval of the Competent Authority as per EP/YP Policy of NHAI.
Basic Qualification	Bachelor's degree in Science / Technology / Engineering / Maths / Statistics from a recognized university/institute
Desirable Qualification	Master's degree in Science / Technology / Engineering / Maths / Statistics from a recognized university/institute
Basic Experience	(a) Minimum 08 years experience in Data Science, Analytics with large data sets and proficiency in SQL and strong proficiency in conducting analysis in Python. (b) Professional Experience building visualizations and dashboards through BI solutions (Power BI, Tableau etc.) (c) Fundamental understanding or demonstrated experience of using algorithmic techniques such as machine learning, optimization, NLP, GIS, network analysis is preferred
Specific Experience (if any)	To be decided by IT Division on case-to-case basis as per emerging need
Proposed Responsibilities	(a) Explore different aspects for use of AI/ ML, designing of algorithms, and advanced analytics tools on the large volume of Data / Information accumulated in Data Lake Portal or other systems of NHAI. Datasets generated in the present system inter alia include Drone footage of project highway; Network Survey Vehicles capturing road condition; Fastag data on user fee collected on NH Projects; GIS data of the NH network and corresponding datasets; Accident and blackspot information on NH Projects; any other transactional data generated on Data Lake under various modules. (b) Perform analytics on data to identify exceptions, anomalies, themes, trends / patterns. (c) Design and develop data visualizations to assist NHAI with actionable information from the data set. (d) Translate data issues/insights into easy-to-understand briefs dashboards based on AI / ML outcome. (e) Deep analysis to break down business scenarios into constituent parameters to identify interventions required. (f) Any other responsibility as assigned by NHAI during the tenure.
Remuneration	At par with industry standards within the Remuneration Band

Position	Joint Advisor (Data Scientist)
No. of Positions	2
Posting	IT-PMU, IT Division, NHAI HQ
Engagement	On Full-Time Contract basis initially for a period of 02 years, which may be extended, subject to performance appraisal, with the approval of the Competent Authority as per EP/YP Policy of NHAI.
Basic Qualification	Bachelor's degree in Science / Technology / Engineering / Maths / Statistics from a recognized university/institute
Desirable Qualification	Master's degree Science / Technology / Engineering / Maths / Statistics / Business Administration from a recognized university/institute
Age Limit	Not exceeding 48 years as on prescribed last date of receipt of online applications.
Desirable Experience	(a) Minimum 05 years experience in Data Science, Analytics with large data sets and proficiency in SQL and strong proficiency in conducting analysis in Python. (b) Professional Experience building visualizations and dashboards through BI solutions (Power BI, Tableau etc.) (c) Fundamental understanding or demonstrated experience of using algorithmic techniques such as machine learning, optimization, NLP, GIS, network analysis is preferred
Specific Experience (if any)	To be decided by IT Division on case-to-case basis as per emerging need
Proposed Responsibilities	(a) Explore different aspects for use of AI/ ML, designing of algorithms, and advanced analytics tools on the large volume of Data / Information accumulated in Data Lake Portal or other systems of NHAI. Datasets generated in the present system inter alia include Drone footage of project highway; Network Survey Vehicles capturing road condition; Fastag data on user fee collected on NH Projects; GIS data of the NH network and corresponding datasets; Accident and blackspot information on NH Projects; any other transactional data generated on Data Lake under various modules. (b) Perform analytics on data to identify exceptions, anomalies, themes, trends / patterns. (c) Design and develop data visualizations to assist NHAI with actionable information from the data set. (d) Translate data issues/insights into easy-to-understand briefs dashboards based on AI / ML outcome. (e) Deep analysis to break down business scenarios into constituent parameters to identify interventions required. (f) Any other responsibility as assigned by NHAI during the tenure.
Remuneration	At par with industry standards within the Remuneration Band

Position	Assistant Advisor (Data Scientist)
No. of Positions	1
Posting	IT-PMU, IT Division, NHAI HQ
Engagement	On Full-Time Contract basis initially for a period of 02 years, which may be extended, subject to performance appraisal, with the approval of the Competent Authority as per EP/YP Policy of NHAI.
Basic Qualification	Bachelor's degree in Science / Technology / Engineering / Maths / Statistics from a recognized university/institute
Desirable Qualification	Master's degree Science / Technology / Engineering / Maths / Statistics / Business Administration from a recognized university/institute
Age Limit	Not exceeding 35 years as on prescribed last date of receipt of online applications.
Desirable Experience	(a) Minimum 02 years experience in Data Science, Analytics with large data sets and proficiency in SQL and strong proficiency in conducting analysis in Python. (b) Professional Experience building visualizations and dashboards through BI solutions (Power BI, Tableau etc.) (c) Fundamental understanding or demonstrated experience of using algorithmic techniques such as machine learning, optimization, NLP, GIS, network analysis is preferred
Specific Experience (if any)	To be decided by IT Division on case-to-case basis as per emerging need
Proposed Responsibilities	(a) Support NHAI in management of its core IT Systems (Data Lake and other supplementary or integrated systems). Understand the business requirements and provide technical inputs wherever required. (b) Designing framework, monitor development of IT enabled products / services such as: i. Incident Response Management System for highway emergencies ii. Rajmarg Yatra App- Citizen interface for NH related feedback and complaints for the highway users iii. GIS based Portal of NH projects for Planning and Monitoring (c) Support NHAI in its digitization journey by re-engineering the existing offline processes and making them online and seamless. Prepare road maps, roll-out plans etc for use of emerging technologies and BI to strengthen decision support system. (d) Conduct user interviews and surveys to gather bottom-up feedback / end user expectations on the functioning of NHAI's IT systems / Mobile apps. Support NHAI to design and roll out systems on Agile model & prioritize SDLC for such initiatives. (e) Finalize functional requirements, UI/UX wireframes, workflows for ongoing and new requirements and check its effectiveness. (f) Liaison, with IT vendors and downstream NHAI counterparts to provide supervisory services and help NHAI in contract management with vendors. Monitoring the use of NHAI IT systems and preparing KPIs for vendor management. (g) Review and approve software artefacts to ensure it meet customer, business and compliance requirements. (h) Co-ordination with high level authorities and stakeholder of other organizations for faster delivery of solutions and resolutions. (i) Any other responsibility as assigned by NHAI during the tenure.
Remuneration	At par with industry standards within the Remuneration Band

Position	Advisor (GIS Specialist)
No. of Positions	1
Posting	IT-PMU, IT Division, NHAI HQ
Engagement	On Full-Time Contract basis initially for a period of 02 years, which may be extended, subject to performance appraisal, with the approval of the Competent Authority as per EP/YP Policy of NHAI.
Basic Qualification	Master's Degree in Traffic and Transportation Planning / Urban Planning / Infra-planning / Geo-informatics /Remote Sensing from a recognized university/institute
Desirable Qualification	
Basic Experience	<ul style="list-style-type: none"> (a) Minimum 08 years experience in GIS based analysis such as algorithms, planning, network optimization or modelling, service area calculations, visualizations etc. (b) Assist in geospatial analysis of incoming data for project management, asset management, defect management, accident/vulnerability analyses etc. (c) Ensure quality compliance of incoming data and those generated from in-house GIS based applications. (d) Extent support towards synchronization of GIS data across multiple platforms within and outside NHAI. (e) Extend support to subject specific training / workshops conducted from time to time.
Specific Experience (if any)	To be decided by IT Division on case-to-case basis as per emerging need
Proposed Responsibilities	<ul style="list-style-type: none"> (a) Overall manage the GIS products and projects within NHAI (b) Understand the requirements of NHAI and provide technical inputs wherever required pertaining to Project Execution and Monitoring. (c) Strengthen the system in place to ensure Highway assets are geo-tagged and updated. (d) Coordinate between vendors, NHAI field and HQ pertaining to GIS related projects and provide technical assistance wherever needed. (e) Explore and promote meaningful use of GIS in the entire lifecycle of a highway project from planning to maintenance including road-safety, identifying accident blackspots etc. (f) Represent NHAI on the Road Asset Management System (RAMS) currently in use / improvement. (g) Explore the use of network analytics/service area calculation for NHAI assets, patrol units, way-side amenities etc. (h) Any other responsibility as assigned by NHAI during the tenure.
Remuneration	At par with industry standards within the Remuneration Band

Position	Joint Advisor (GIS Specialist)
No. of Positions	2
Posting	IT-PMU, IT Division, NHAI HQ
Engagement	On Full-Time Contract basis initially for a period of 02 years, which may be extended, subject to performance appraisal, with the approval of the Competent Authority as per EP/YP Policy of NHAI.
Basic Qualification	Master's Degree in Traffic and Transportation Planning / Urban Planning / Infra-planning / Geo-informatics / Remote Sensing from a recognized university/institute
Desirable Qualification	
Age Limit	Not exceeding 48 years as on prescribed last date of receipt of online applications.
Desirable Experience	<ul style="list-style-type: none"> (a) Minimum 05 years experience in GIS based analysis such as algorithms, planning, network optimization or modelling, service area calculations, visualizations etc. (b) Assist in geospatial analysis of incoming data for project management, asset management, defect management, accident/vulnerability analyses etc. (c) Ensure quality compliance of incoming data and those generated from in-house GIS based applications. (d) Extent support towards synchronization of GIS data across multiple platforms within and outside NHAI. (e) Extend support to subject specific training / workshops conducted from time to time.
Specific Experience (if any)	To be decided by IT Division on case-to-case basis as per emerging need
Proposed Responsibilities	<ul style="list-style-type: none"> (a) Manage the GIS products and projects within NHAI (b) Understand the requirements of NHAI and provide technical inputs wherever required pertaining to Project Execution and Monitoring. (c) Strengthen the system in place to ensure Highway assets are geo-tagged and updated. (d) Coordinate between vendors, NHAI field and HQ pertaining to GIS related projects and provide technical assistance wherever needed. (e) Explore and promote meaningful use of GIS in the entire lifecycle of a highway project from planning to maintenance including road-safety, identifying accident blackspots etc. (f) Represent NHAI on the Road Asset Management System (RAMS) currently in use / improvement. (g) Explore the use of network analytics/service area calculation for NHAI assets, patrol units, way-side amenities etc. (h) Any other responsibility as assigned by NHAI during the tenure.
Remuneration	At par with industry standards within the Remuneration Band

Position	Assistant Advisor (GIS Specialist)
No. of Positions	1
Posting	IT-PMU, IT Division, NHAI HQ
Engagement	On Full-Time Contract basis initially for a period of 02 years, which may be extended, subject to performance appraisal, with the approval of the Competent Authority as per EP/YP Policy of NHAI.
Basic Qualification	Master's Degree in Traffic and Transportation Planning / Urban Planning / Infra-planning / Geo-informatics /Remote Sensing from a recognized university/institute
Desirable Qualification	
Age Limit	Not exceeding 35 years as on prescribed last date of receipt of online applications.
Desirable Experience	<p>(a) Minimum 03 years experience in GIS based analysis such as algorithms, planning, network optimization or modelling, service area calculations, visualizations etc.</p> <p>(b) Assist in geospatial analysis of incoming data for project management, asset management, defect management, accident/vulnerability analyses etc.</p> <p>(c) Ensure quality compliance of incoming data and those generated from in-house GIS based applications.</p> <p>(d) Extent support towards synchronization of GIS data across multiple platforms within and outside NHAI.</p> <p>(e) Extend support to subject specific training / workshops conducted from time to time.</p>
Specific Experience (if any)	To be decided by IT Division on case-to-case basis as per emerging need
Proposed Responsibilities	<p>(a) Support NHAI in management of its core IT Systems (Data Lake and other supplementary or integrated systems). Understand the business requirements and provide technical inputs wherever required.</p> <p>(b) Designing framework, monitor development of IT enabled products / services such as:</p> <ol style="list-style-type: none"> i. Incident Response Management System for highway emergencies ii. Rajmarg Yatra App- Citizen interface for NH related feedback and complaints for the highway users iii. GIS based Portal of NH projects for Planning and Monitoring <p>(c) Support NHAI in its digitization journey by re-engineering the existing offline processes and making them online and seamless. Prepare road maps, roll-out plans etc for use of emerging technologies and BI to strengthen decision support system.</p> <p>(d) Conduct user interviews and surveys to gather bottom-up feedback / end user expectations on the functioning of NHAI's IT systems / Mobile apps. Support NHAI to design and roll out systems on Agile model & prioritize SDLC for such initiatives.</p> <p>(e) Finalize functional requirements, UI/UX wireframes, workflows for ongoing and new requirements and check its effectiveness.</p> <p>(f) Liaison, with IT vendors and downstream NHAI counterparts to provide supervisory services and help NHAI in contract management with vendors. Monitoring the use of NHAI IT systems and preparing KPIs for vendor management.</p> <p>(g) Review and approve software artefacts to ensure it meet customer, business and compliance requirements.</p> <p>(h) Co-ordination with high level authorities and stakeholder of other organizations for faster delivery of solutions and resolutions.</p> <p>(i) Any other responsibility as assigned by NHAI during the tenure.</p>
Remuneration	At par with industry standards within the Remuneration Band

Position	Advisor (Solution Architect)
No. of Positions	1
Posting	IT-PMU, IT Division, NHAI HQ
Engagement	On Full-Time Contract basis initially for a period of 02 years, which may be extended, subject to performance appraisal, with the approval of the Competent Authority as per EP/YP Policy of NHAI.
Basic Qualification	Bachelor's degree in Computer Science, IT, business administration or related fields from a recognized university/institute
Desirable Qualification	Master's degree in Computer Science, IT, business administration or related fields from a recognized university/institute
Basic Experience	<ul style="list-style-type: none"> (a) Minimum 08 years of experience spread across technology & solutions architect, technology policy, and related industry. (b) Proven work experience as a Solution Architect or similar role. Previous project management experience is advantageous. (c) Relevant certifications in solutions architecture and information systems will be a plus. (d) Previous experiences of working in a large government organisation will be an advantage. (e) Adequate knowledge and familiarity with domestic and global technology practices and regulations. (f) Prior experience in large scale ERP projects and transaction-based data management (privacy and security) for large-scale project and organisations. (g) Formalising the governance and reporting frameworks to update stakeholders at different levels and frequency.
Specific Experience (if any)	To be decided by IT Division on case-to-case basis as per emerging need
Proposed Responsibilities	<ul style="list-style-type: none"> (a) Responsible to examine the as-is process, do the gap analysis and design the to be process. (b) Understand business architecture and translate into technology and application architecture. (c) Must be aware of foundation and common industry standards and frameworks. (d) Design and adopt enterprise specific standards and frameworks. (e) Develop a comprehensive strategic technological vision. (f) Aware of architecture framework (TOGAF, CoBIT, ITIL)
Remuneration	At par with industry standards within the Remuneration Band

Position	Joint Advisor (Solution Architecture)
No. of Positions	1
Posting	IT-PMU, IT Division, NHAI HQ
Engagement	On Full-Time Contract basis initially for a period of 02 years, which may be extended, subject to performance appraisal, with the approval of the Competent Authority as per EP/YP Policy of NHAI.
Basic Qualification	Bachelor's degree in Computer Science, IT, business administration or related fields from a recognized university/institute
Desirable Qualification	Master's Degree in Computer Science, IT, business administration or related fields from a recognized university/institute
Age Limit	Not exceeding 48 years as on prescribed last date of receipt of online applications.
Desirable Experience	<ul style="list-style-type: none"> (a) Minimum 05 years of experience spread across technology & solutions architect, technology policy, and related industry. (b) Proven work experience as a Solution Architect or similar role. Previous project management experience is advantageous. (c) Relevant certifications in solutions architecture and information systems will be a plus. (d) Previous experiences of working in a large government organisation will be an advantage. (e) Adequate knowledge and familiarity with domestic and global technology practices and regulations. (f) Prior experience in large scale ERP projects and transaction-based data management (privacy and security) for large-scale project and organisations. (g) Formalising the governance and reporting frameworks to update stakeholders at different levels and frequency.
Specific Experience (if any)	To be decided by IT Division on case-to-case basis as per emerging need
Proposed Responsibilities	<ul style="list-style-type: none"> (a) Responsible to examine the as-is process, do the gap analysis and design the to be process. (b) Understand business architecture and translate into technology and application architecture. (c) Must be aware of foundation and common industry standards and frameworks. (d) Design and adopt enterprise specific standards and frameworks. (e) Develop a comprehensive strategic technological vision. (f) Aware of architecture framework(TOGAF, CoBIT, ITIL)
Remuneration	At par with industry standards within the Remuneration Band

Position	Advisor (Training & Support)
No. of Positions	1
Posting	IT-PMU, IT Division, NHAH HQ
Engagement	On Full-Time Contract basis initially for a period of 02 years, which may be extended, subject to performance appraisal, with the approval of the Competent Authority as per EP/YP Policy of NHAH.
Basic Qualification	Bachelor's degree in Business Administration or Human Resource Management or related fields from a recognized university/institute
Desirable Qualification	Master's Degree in Business Administration or Human Resource Management or related fields from a recognized university/institute
Basic Experience	(a) Minimum 08 years of experience in imparting training, documentation creation and management, particularly in a customer support environment. (b) Ability to work in a fast paced, demanding, deadline-driven environment. (c) Excellent written and verbal communication skills. (d) Strong organizational and multitasking abilities. (e) Proficiency in using documentation tools and software. (f) Knowledge of customer support processes and best practices. (g) Ability to work collaboratively in a team-oriented environment. (h) Attention to detail and commitment to delivering high-quality documentation.
Specific Experience (if any)	To be decided by IT Division on case-to-case basis as per emerging need
Proposed Responsibilities	(a) Defining learning operating models & strategy, conducting learning gap analyses and translate them into objectives, develop instructional (digital) design, curation and deployment of learning solutions (including virtual, physical or hybrid approach). (b) Develop customised training programs based on the needs of various stakeholders. (c) Ability to solve specific training problems, either on an one-on-one basis or in groups. (d) Assess the development by feedback from the stakeholders on training/workshops. (e) Develop and maintain comprehensive documentation for products, services, and customer support processes. (f) Create user guides, FAQs, SOPs, and troubleshooting documentation to assist stakeholders in resolving issues independently. (g) Work closely with support teams to gather insights and updates for documentation improvement. (h) Implement best practices for maintaining high-quality documentation standards. (i) Identify opportunities and implement changes for process improvement and efficiency in documentation creation and maintenance.
Remuneration	At par with industry standards within the Remuneration Band

Position	Joint Advisor (Training & Support)
No. of Positions	2
Posting	IT-PMU, IT Division, NHAI HQ
Engagement	On Full-Time Contract basis initially for a period of 02 years, which may be extended, subject to performance appraisal, with the approval of the Competent Authority as per EP/YP Policy of NHAI.
Basic Qualification	Bachelor's degree in Business Administration or Human Resource Management or related fields from a recognized university/institute
Desirable Qualification	Master's Degree in Business Administration or Human Resource Management or related fields from a recognized university/institute
Age Limit	Not exceeding 48 years as on prescribed last date of receipt of online applications.
Desirable Experience	<ul style="list-style-type: none"> (a) Minimum 05 years of experience in documentation creation and management, particularly in a customer support environment. (b) Excellent written and verbal communication skills. (c) Strong organizational and multitasking abilities. (d) Proficiency in using documentation tools and software. (e) Knowledge of customer support processes and best practices. (f) Ability to work collaboratively in a team-oriented environment. (g) Attention to detail and commitment to delivering high-quality documentation.
Specific Experience (if any)	To be decided by IT Division on case-to-case basis as per emerging need
Proposed Responsibilities	<ul style="list-style-type: none"> (a) Defining learning operating models & strategy, conducting learning gap analyses and translate them into objectives, develop instructional (digital) design, curation and deployment of learning solutions (including virtual, physical or hybrid approach). (b) Develop customised training programs based on the needs of various stakeholders. (c) Ability to solve specific training problems, either on an one-on-one basis or in groups. (d) Assess the development by feedback from the stakeholders on training/workshops. (e) Develop and maintain comprehensive documentation for products, services, and customer support processes. (f) Create user guides, FAQs, SOPs, and troubleshooting documentation to assist stakeholders in resolving issues independently. (g) Work closely with support teams to gather insights and updates for documentation improvement. (h) Implement best practices for maintaining high-quality documentation standards. (i) Identify opportunities and implement changes for process improvement and efficiency in documentation creation and maintenance.
Remuneration	At par with industry standards within the Remuneration Band

CALCULATION OF REMUNERATION OF EPs IN IT-PMU ENGAGED FROM OPEN MARKET

(A) Position	(B) Equivalent position in NHA	(C) Grade Pay	(D) Basic pay at entry as per 7th CPC	(E) DA	(F) HRA	(G) Transport Allowance	(H) Total (Rs.)	(I) Proposed range of consolidated emoluments at entry level (+20% of column H)*
Advisor	General Manager	8700	Pay Level 13 (Rs.123100-215900)	50%	As per extant rates	7200 + DA thereon @ 50%		
Calculation			123100	61550	34468	10800	229918	230000 - 276000
Joint Advisor	Deputy General Manager	7600	Pay Level 12 (Rs.78800-209200)	50%	As per extant rates	7200 + DA thereon @ 50%		
Calculation			78800	39400	22064	10800	151064	150000 - 181000
Assistant Advisor	Deputy Manager	5400	Pay Level 10 (Rs.56100-177500)	50%	As per extant rates	7200 + DA thereon @ 50%		
Calculation			56100	28050	15708	10800	110658	110000 - 132000

DETAILED TERMS & CONDITIONS SPECIFIC TO EPs OF IT-PMU FROM OPEN MARKET

(1) Monthly Remuneration Band:-

Sl. No.	Position	Monthly Remuneration Bands (Rs.)	Remarks
(i)	Advisor	Rs.2,30,000 - 2,76,000/-	Remuneration shall be moderated keeping in view the remuneration such person is getting in the open market in his / her last / present assignment. He / She may be offered an increase of 10% to 20% of his emoluments drawn at the time of engagement.
(ii)	Jt Advisor	Rs.1,50,000 - 1,81,000/-	
(iii)	Asstt Advisor	Rs.1,10,000 - 1,32,000/-	

(2) The remuneration shall be decided by a Remuneration Committee comprising the following:-

- (a) CGM (Admn.)
- (b) CGM (Fin.)
- (c) CGM (IT)

(3) The Remuneration Committee may devise its own mechanism to arrive at the appropriate remuneration and may seek requisite documents from the candidate, if required. The recommendations of the Remuneration Committee shall be approved by the Member / Chairman, as the case may be. The Remuneration Cap may be relaxed for exceptional candidates with the approval on the Executive Committee (EC) on case to case basis.

(4) In case of requirement of travel outside HQ for official work, the entitlement of EPs for the purpose of TA & DA, etc. shall be as per Policy Circular No.1.3.1.17 dated 26.06.2018 (as amended from time to time).

(5) Performance Appraisal and Increment:

- (a) Annual Performance Appraisal to be conducted by the Division Head.
- (b) Schedule of Performance Appraisal may be conducted once in a year in 02 cycles, viz. 01 January and 01 July each year.
- (c) Eligibility to qualify for a particular cycle will depend on minimum 06 months of continuous service preceding the cycle.
- (d) The performance appraisal will be linked with Key Performance Indicators (KPI) to be decided in advance with the approval of the Member concerned.
- (e) Annual increment post performance appraisal @ 10% of the previous year's remuneration w.e.f. either 01 January or 01 July (only once in a year), as the case may be, to be approved by the Competent Authority. This shall also be applicable to Joint Advisors under IT-PMU engaged as on date. However, a fresh contract shall be executed with them for revised remuneration with KPIs.

(6) **Professional development & Tenure:**

(A) Provision for professional development:

- (i) **Re-engagement as Joint Advisor** - On completion of 03 years continuous and satisfactory service as Assistant Advisor, the EP may be considered for fresh engagement as Joint Advisor, after following due process of engagement, as per Guidelines and procedure for engaging EP/YP in NHAI No.1.3.1.12/2027 dated 21.06.2017 (as amended from time to time).
- (ii) **Re-engagement as Advisor** - After completion of 04 years continuous and satisfactory service tenure as Joint Advisor, the EP may be considered for fresh engagement as Advisor, after following due process of engagement, as per Guidelines and procedure for engaging EP/YP in NHAI No.1.3.1.12/2027 dated 21.06.2017 (as amended from time to time).

(B) The tenure (including extension of tenure of the EP in IT-PMU) shall be as per Guidelines and procedure for engaging EP/YP in NHAI No.1.3.1.12/2027 dated 21.06.2017 (as amended from time to time).

(7) **Other benefits, including flexibility:**

- (a) The leave without pay for the purpose of professional course / study / training for a maximum period of 03 months during the tenure of 03 years may be provided to EPs in IT-PMU.
- (b) Work from home on case-to-case basis for maximum up to 30 days in a year (single or multiple instances) may be provided to EPs in IT-PMU, subject to the condition that Division Head certifies that the EP had performed official work during work from home. This would enable NHAI to prevent attrition amongst EPs in IT-PMU and is also as per the extant industry practice.
- (c) To prevent the confidentiality of data of NHAI, Laptops (on returnable basis) may be provided to EPs of the IT-PMU, which shall be procured by IT Division of NHAI. Any loss of laptop by EP should be recovered from the EP. IT Division shall devise the adequate checks and safeguards for safety & security of the asset & data.
- (d) EPs in IT-PMU shall be entitled to 08 days paid casual leave and 15 days paid sick leave in a calendar year. No un-availed leave will be allowed to be carried forward to the next year. They shall not be entitled to any other kind of leave.
- (e) The maternity leave / benefit to female EPs may be provided as per the Maternity Benefit Act, 1961 (as amended from time to time).

(8) **Measures to safeguard NHAI's interests:**

In addition to the above liberalizations/incentives, NHAI shall also consider the following in order to safeguard its interests:

- (a) The applicant selected by NHAI for IT-PMU should not decline the offer of engagement. In case he / she declines the offer of engagement, his/her candidature shall not be considered for any further engagement by NHAI for a period of two years from the date of cancellation of offer of engagement.
- (b) Provision of a reserve list of shortlisted candidates in decreasing order of score who may be approached, if the selected candidate declines to join or leaves NHAI before 06 months of joining.



- (c) Provision of lock-in period: To safeguard the interests of NHAI, it is proposed to include a condition of lock-in period in the Contract Agreement to be executed with EPs in IT-PMU, in consultation with Legal Division:-
- (I) **For Advisors:** 02 years lock-in period (excluding notice period) with provision of liability of payment of Rs 5.00 Lakhs in case of premature resignation by EP.
 - (II) **For Joint Advisors:** 02 years lock-in period (excluding notice period) with provision of liability of payment of Rs 3.00 Lakhs in case of premature resignation by EP.
 - (III) **For Assistant Advisors:** 02 years lock-in period (excluding notice period) with provision of liability of payment of Rs 2.00 Lakhs in case of premature resignation by EP.
- (d) The engagement of an EP in IT-PMU can be terminated by either party by giving 60 days' notice in advance or payment of two Minimum of 02 month's remuneration by either side in lieu of 60 days' notice period, as the case may be and the contract would terminate automatically at the end of such period.
- (e) If the performance of a candidate is not up to the mark, his/her contract may be terminated by NHAI giving 02 months' notice.
- (9) The terms & conditions, which are not specifically mentioned hereinabove shall be governed as per Guidelines and procedure for engaging EP/YP in NHAI No.1.3.1.12/2027 dated 21.06.2017 (as amended from time to time). Any relaxation in the provisions of the policy shall be made with the approval of the Executive Committee (EC).

