

# NATIONAL INSTITUTE OF DISASTER MANAGEMENT

Delhi

Date: 11.06.2025

## **Advertisement for Senior level / Mid Level Experts under the Project Development of National Highways Climate Adaptation Policy and Guidelines (HighCAP) at NIDM, Delhi**

Advertisement for engaging following Sr. Level / Mid Level Experts on contractual basis, under the Project Development of National Highways Climate Adaptation Policy and Guidelines (HighCAP) with Ministry of Road Transport and Highways (MoRTH).

S. No.	Name of Position	No. of Position	Duration	Remuneration p.m.
1.	Sr. Level Expert (Policy Experts)	01	60-100 days	Rs. 200000/-
2.	Sr. Level Expert (Codes and Manuals Experts)	02	60-100 days	Rs. 175000/-
3.	Mid Level Expert (Cost Benefit Analysis Expert)	02	60-100 days	Rs. 175000/-
4.	Mid Level Expert (TEMP and Traffic Evacuation Plan (TEP) Experts)	02	60-100 days	Rs. 110000/-

**Selection Process:** The **filled application form and Curriculum Vitae** must be sent to NIDM through email at [highcap.nidm@nidm.gov.in](mailto:highcap.nidm@nidm.gov.in) **on or before 27.06.2025**. Only Selected Candidates would be called for Personal Interaction at NIDM, Rohini Campus.

The detailed Terms of Reference (Remuneration, Qualifications & Responsibilities, etc.) are available below:

**Scroll Below for the Detailed TOR and Application Forms**

## 1.

### National Institute of Disaster Management

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#### Terms of reference of Senior-Level Experts (Policy Expert) (Part time)

The National Institute of Disaster Management (NIDM) is seeking experienced and qualified individuals or organizations for the **position of Policy Expert (1 position)** under the project “Development of National Highways Climate Adaptation Policy and Guidelines (HighCAP)”.

The "Development of National Highways Climate Adaptation Policy and Guidelines (HighCAP)" project is a strategic initiative funded by the Ministry of Road Transport and Highways (MoRTH) under the Green National Highway Corridor Project (GNHCP). Implemented by the National Institute of Disaster Management (NIDM), Ministry of Home Affairs GoI, the project aims to develop policy and guidelines to enhance the climate resilience of India's National Highway (NH) infrastructure. The project, involves comprehensive climate impact projections, vulnerability assessments, multi-hazard risk and resilience modelling and policy recommendations to integrate climate adaptation into highway planning, construction and maintenance. The project covers a 2000 km stretch of NH segments spanning diverse climatic and physiographic regions, including areas prone to extreme heat, floods, landslides, and seismic activity. It focuses on identifying vulnerable highway stretches and assets to climate extremes and multi-hazard risks, developing a comprehensive resilience framework with cost-effective adaptation strategies, analyzing existing highway design codes and standards for climate adaptation improvements, formulating a National Highway Climate Adaptation Policy and Guidelines, establishing a Transport Emergency Management Plan (TEMP) and Traffic Evacuation Plan (TEP), and conducting capacity-building initiatives and pilot trainings for policy implementation.

#### 1) Educational Qualification:

Masters’ Degree or PhD in Public Policy, Urban Planning, Transportation Engineering, Governance or Disaster Management or related fields from a recognized institution.

#### 2) Experience:

Minimum 15 years of experience in one or more of the following areas:

- Transportation policy
- Public policy formulation and governance in transport, infrastructure, or climate adaptation.
- Highway and transport sector regulations, including IRC codes, MoRTH guidelines, and BIS standards.
- Disaster risk reduction (DRR) and climate adaptation strategies for infrastructure.
- Policy evaluation and impact assessment from the results generated from project for road transport and urban mobility.
- Stakeholder engagement and multi-agency coordination in policy implementation.
- Sustainable and climate-resilient infrastructure development.

#### Desirable:

- Experience working with government agencies, multilateral institutions (World Bank, ADB, UNDP), or reputed think tanks on transportation and infrastructure policies.
- Expertise in climate finance mechanisms, infrastructure vulnerability assessment, and policymaking.

- Knowledge of GIS-based policy analytics, smart city frameworks, and digital infrastructure governance.

### **3) Tasks to be carried out (But not limited to):**

- Advocate for evidence-based policymaking framework and guidelines for the project.
- Conduct a detailed review of existing policies, guidelines, and regulatory frameworks governing national highways and climate adaptation.
- Identify gaps, overlaps, and inconsistencies in the current policy frameworks and guidelines.
- Benchmark international best practices and suggest relevant policy adaptations for India.
- Draft a comprehensive policy framework in consultation with project team integrating climate adaptation into highway planning, design, construction, and maintenance.
- Propose institutional mechanisms for mainstreaming climate adaptation across transport planning bodies.
- Recommend an action plan for policy implementation, including roles and responsibilities of government agencies.
- Recommend policy interventions for climate adaptations.

### **4) Deliverables**

- Gap Analysis Report on existing transport and climate adaptation policies.
- Draft National Highways Climate Adaptation Policy and Guidelines.
- Implementation Strategy Document outlining institutional responsibilities.
- Stakeholder Consultation Reports summarizing expert inputs and recommendations.

### **5) Duration**

The period of engagement will be 60 to 100 days based on requirements under the project, with no extension beyond 100 days. The engagement would be purely on contractual basis under the project and would not entail for any claim of employment with NIDM establishment or the government.

**6) Supervision & Guidance:** The expert will report to the **Project Director** and work in close coordination with NIDM's project team, relevant government agencies, and other stakeholders. Regular progress updates, draft reports, and final deliverables shall be submitted as per the approved work plan.

**7) Remuneration:** ₹2,00,000 per month. Remuneration will be solely based on deliverables.

**Disclaimer:** NIDM will have discretion of selecting candidates by search and selection if required.

**2.**  
**National Institute of Disaster Management**  
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**Terms of reference of Senior level Experts (Codes and Manuals Expert) (Part time)**

The National Institute of Disaster Management is seeking experienced and qualified individuals or organizations as Experts (**2 positions**) under the project “Development of National Highways Climate Adaptation Policy and Guidelines”.

The "Development of National Highways Climate Adaptation Policy and Guidelines (HighCAP)" project is a strategic initiative funded by the Ministry of Road Transport and Highways (MoRTH) under the Green National Highway Corridor Project (GNHCP). Implemented by the National Institute of Disaster Management (NIDM), Ministry of Home Affairs GoI, the project aims to develop policy and guidelines to enhance the climate resilience of India's National Highway (NH) infrastructure. The project, involves comprehensive climate impact projections, vulnerability assessments, multi-hazard risk and resilience modelling and policy recommendations to integrate climate adaptation into highway planning, construction and maintenance. The project covers a 2000 km stretch of NH segments spanning diverse climatic and physiographic regions, including areas prone to extreme heat, floods, landslides, and seismic activity. It focuses on identifying vulnerable highway stretches and assets to climate extremes and multi-hazard risks, developing a comprehensive resilience framework with cost-effective adaptation strategies, analyzing existing highway design codes and standards for climate adaptation improvements, formulating a National Highway Climate Adaptation Policy and Guidelines, establishing a Transport Emergency Management Plan (TEMP) and Traffic Evacuation Plan (TEP), and conducting capacity-building initiatives and pilot trainings for policy implementation.

**1) Educational Qualification:**

Masters’ Degree or PhD in Transportation Engineering/ Structural Engineering / Civil Engineering / Geotechnical Engineering or related subject with minimum 15 years of experience.

**2) Experience:**

Minimum 7 years of experience in one or more of the following:

Pavement design and sustainability, Materials including geological and soils component expertise, Road infrastructure design and materials- including bridges, culverts etc., IRC codes and manuals, Climate adaptation for road and highway infrastructure, Nature based solutions to climate change, economic feasibility of Design, etc.

**Desirable:** Climate resilient infrastructure, Experience in IRC codes, highway design standards, infrastructure safety compliance, advance construction techniques.

Inter-disciplinary knowledge and exposure shall be preferred.

**3) Tasks to be carried out (But not limited to):**

**Position-1 (senior consultant)**

- Conduct a comprehensive review of relevant IRC codes, MoRTH specifications, and BIS standards related to highway design, construction, and maintenance.
- Identify gaps and inconsistencies in existing design standards, particularly concerning climate resilience and sustainability.
- Assess the applicability of global best practices in highway climate adaptation and suggest modifications to Indian standards.

**Position-2 (senior consultant)**

- Evaluate the impact of climate change (flooding, extreme heat, landslides, etc.) on highway infrastructure.
- Recommend climate-resilient design principles for pavements, bridges, embankments, culverts, and drainage systems.
- Recommend standards to improve infrastructure safety compliance, focusing on vulnerable zones (flood-prone, landslide-prone, coastal areas).
- Support in preparing technical reports, manuals, and guidelines for climate-adaptive highway infrastructure.

#### **4) Deliverables**

##### **Position-1 (senior consultant)**

Gap Analysis Report – A detailed assessment of existing IRC codes, MoRTH specifications, and BIS standards, highlighting gaps and inconsistencies related to climate resilience and adaptation.

Best Practices and Benchmarking Report – A comparative study of global best practices in highway design recommendations for modifications to Indian standards.

Infrastructure Safety Compliance Framework – Development of safety standards for roadside drainage, slope stability, and erosion control, with specific recommendations for flood-prone, landslide-prone, and coastal areas.

Final Policy and Implementation Recommendations – A structured set of policy recommendations for addressing the identified gaps and implementation strategies.

##### **Position-2 (senior consultant)**

Best Practices and Benchmarking Report – A comparative study of global best practices in highway climate adaptation and recommendations for modifications to Indian standards.

Climate-Resilient Design Guidelines – Development of climate-adaptive design principles for pavements, bridges, embankments, culverts, and drainage systems.

Infrastructure Safety Compliance Framework – Development of safety standards for roadside drainage, slope stability, and erosion control, with specific recommendations for flood-prone, landslide-prone, and coastal areas.

Final Policy and Implementation Recommendations – A structured set of policy recommendations and implementation strategies for enhancing climate resilience in national highways.

#### **5) Duration**

The period of engagement will be 60 to 100 days based on requirements under the project, with no extension beyond 100 days. The engagement would be purely on contractual basis under the project and would not entail for any claim of employment with NIDM establishment or the government.

**6) Supervision & Guidance:** The expert will report to the **Project Director** and work in close coordination with NIDM's project team, relevant government agencies, and other stakeholders. Regular progress updates, draft reports, and final deliverables shall be submitted as per the approved work plan.

**7) Remuneration:** ₹1,75,000 per month. Remuneration will be solely based on deliverables.

**Disclaimer:** NIDM will have discretion of selecting candidates by search and selection if required.

**3.**  
**National Institute of Disaster Management**  
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**Terms of reference of Mid-level Experts (Cost Benefit Analysis Expert) (Part time)**

The National Institute of Disaster Management (NIDM) is seeking experienced and qualified individuals or organizations for the position of **Cost-Benefit Analysis (CBA) Expert (2 positions)** under the project **“Development of National Highways Climate Adaptation Policy and Guidelines (HighCAP).”**

The "Development of National Highways Climate Adaptation Policy and Guidelines (HighCAP)" project is a strategic initiative funded by the Ministry of Road Transport and Highways (MoRTH) under the Green National Highway Corridor Project (GNHCP). Implemented by the National Institute of Disaster Management (NIDM), Ministry of Home Affairs GoI, the project aims to develop policy and guidelines to enhance the climate resilience of India's National Highway (NH) infrastructure. The project, involves comprehensive climate impact projections, vulnerability assessments, multi-hazard risk and resilience modelling and policy recommendations to integrate climate adaptation into highway planning, construction and maintenance. The project covers a 2000 km stretch of NH segments spanning diverse climatic and physiographic regions, including areas prone to extreme heat, floods, landslides, and seismic activity. It focuses on identifying vulnerable highway stretches and assets to climate extremes and multi-hazard risks, developing a comprehensive resilience framework with cost-effective adaptation strategies, analyzing existing highway design codes and standards for climate adaptation improvements, formulating a National Highway Climate Adaptation Policy and Guidelines, establishing a Transport Emergency Management Plan (TEMP) and Traffic Evacuation Plan (TEP), and conducting capacity-building initiatives and pilot trainings for policy implementation.

**1) Educational Qualification:**

Master's Degree or PhD in Environmental Economics, Economics, Civil Engineering, Transportation Engineering, Infrastructure Finance, Public Policy, or related disciplines from a recognized institution.

**2) Experience:**

Minimum 10 years of experience in one or more of the following:

- Cost-benefit analysis (CBA) including DRR options for highways, economic feasibility studies, and financial modeling for transport infrastructure projects.
- Multi-criteria decision analysis (MCDA) and economic impact modeling for road infrastructure projects.
- Application of global best practices in cost-effective climate adaptation measures for road infrastructure.

**Desirable:**

- Experience in highway climate adaptation projects with MoRTH, NHAI, World Bank, ADB, or multilateral institutions.
- Familiarity with Road infrastructure guidelines, MoRTH guidelines, and codes/manuals.
- Inter-disciplinary knowledge and exposure shall be preferred.

**3) Tasks to be carried out (But not limited to):**

- Develop a detailed methodology for carrying out CBA.
- Conduct a comprehensive economic analysis of climate risks and adaptation costs for NH infrastructure.

- Assess the return on investment (ROI), payback period, and net present value (NPV) of adaptation strategies.
- Quantify economic losses due to climate hazards (flooding, landslides, extreme heat) on highway tolls.
- Evaluate long-term financial implications of integrating climate-adaptation designs into NH projects.
- Assess capital and operational cost estimates for different adaptation measures.
- Assist in the preparation of technical reports, manuals, and guidelines on economic viability assessments for climate adaptation.

#### **4) Deliverables**

- Cost-Benefit Analysis Report – A detailed assessment of cost-effectiveness, economic feasibility, and return on investment of proposed adaptation measures (under 3 categories viz., suitable, middle path and cheaper in terms of cost).
- Economic Impact Assessment Report – Analysis of climate-induced economic risks for national highways.
- Final Policy Recommendations – Structured policy and implementation strategies for integrating cost-benefit analysis into NH climate adaptation planning.

#### **5) Duration**

The period of engagement will be 60 to 100 days based on requirements under the project, with no extension beyond 100 days. The engagement would be purely on contractual basis under the project and would not entail for any claim of employment with NIDM establishment or the government.

**6) Supervision & Guidance:** The expert will report to the **Project Director** and work in close coordination with NIDM's project team, relevant government agencies, and other stakeholders. Regular progress updates, draft reports, and final deliverables shall be submitted as per the approved work plan.

**7) Remuneration:** ₹ 1,75,000 per month. Remuneration will be solely based on deliverables.

**Disclaimer:** NIDM will have discretion of selecting candidates by search and selection if required.

**4.**  
**National Institute of Disaster Management**

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**Terms of reference of Mid-level Experts (TEMP/TEP) (Part time)**

The National Institute of Disaster Management (NIDM) is seeking experienced and qualified individuals or organizations for the position of Transport Emergency Management Plan (TEMP) and Traffic Evacuation Plan (TEP) Expert (**2 positions**) under the project “Development of National Highways Climate Adaptation Policy and Guidelines (HighCAP)”.

The "Development of National Highways Climate Adaptation Policy and Guidelines (HighCAP)" project is a strategic initiative funded by the Ministry of Road Transport and Highways (MoRTH) under the Green National Highway Corridor Project (GNHCP). Implemented by the National Institute of Disaster Management (NIDM), Ministry of Home Affairs GoI, the project aims to develop policy and guidelines to enhance the climate resilience of India's National Highway (NH) infrastructure. The project, involves comprehensive climate impact projections, vulnerability assessments, multi-hazard risk and resilience modelling and policy recommendations to integrate climate adaptation into highway planning, construction and maintenance. The project covers a 2000 km stretch of NH segments spanning diverse climatic and physiographic regions, including areas prone to extreme heat, floods, landslides, and seismic activity. It focuses on identifying vulnerable highway stretches and assets to climate extremes and multi-hazard risks, developing a comprehensive resilience framework with cost-effective adaptation strategies, analyzing existing highway design codes and standards for climate adaptation improvements, formulating a National Highway Climate Adaptation Policy and Guidelines, establishing a Transport Emergency Management Plan (TEMP) and Traffic Evacuation Plan (TEP), and conducting capacity-building initiatives and pilot trainings for policy implementation.

**1) Educational Qualification:**

Masters’ Degree or PhD in Transportation Engineering / Civil Engineering / Disaster Management / Urban Planning or related fields from a recognized institution.

**2) Experience:**

Minimum **5 years of experience** in one or more of the following areas:

Transport emergency planning, emergency management plan and disaster resilience strategies, Highway and urban road traffic evacuation planning, Incident management for road and highway networks, Intelligent Traffic Management Systems (ITMS) and GIS-based transport modeling, Risk assessment and vulnerability analysis of transportation networks, Development of emergency response and contingency plans for highways.

**Desirable:**

Expertise in multi-modal evacuation strategies and Interdisciplinary exposure to geospatial technologies, risk analytics, and emergency response systems.

**3) Tasks to be carried out (But not limited to):**

- Conduct a review of existing TEMP and TEP frameworks at national levels.
- Identify gaps, inefficiencies, and areas for improvement in current evacuation planning and transport emergency response.
- Assess international best practices and recommend improvements in evacuation during disasters for Indian highways.



- Formulate a standardized framework for highway emergency response and traffic evacuation during disasters such as floods, cyclones, landslides, and extreme weather events.
- Develop hazard-specific emergency response protocols for national highways.
- Recommend advanced traffic monitoring and control systems (ITS, AI-based traffic management, GPS tracking, and IoT-enabled systems) for emergency response.
- Ensure integration of emergency response teams, law enforcement, and highway authorities in the framework.
- Design efficient evacuation route strategies for different hazard scenarios (earthquakes, floods, industrial disasters, etc.).
- GIS-based transport modeling to simulate traffic flow during emergency evacuations.
- Develop a decision-support system for dynamic rerouting and congestion management during disasters.
- Establish guidelines for temporary shelters, relief camps, and emergency response stations along highways.
- Develop contingency strategies for transport networks in high-risk zones.

#### **4) Deliverables**

- Comprehensive report on the current gaps in TEMP and TEP.
- Guidelines and recommendations for enhancing transport emergency preparedness.
- Traffic evacuation models and response strategies for national highways.
- Develop a framework for TEMP/TEP.

#### **5) Duration**

The period of engagement will be 60 to 100 days based on requirements under the project, with no extension beyond 100 days. The engagement would be purely on contractual basis under the project and would not entail for any claim of employment with NIDM establishment or the government.

**6) Supervision & Guidance:** The expert will report to the **Project Director** and work in close coordination with NIDM's project team, relevant government agencies, and other stakeholders. Regular progress updates, draft reports, and final deliverables shall be submitted as per the approved work plan.

**7) Remuneration:** ₹1,10,000 per month. Remuneration will be solely based on deliverables.

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**NATIONAL INSTITUTE OF DISASTER MANAGEMENT**

Rohini Sector 29, New Delhi-110042

**Application format for the position**

**under the Project HighCAP of NIDM**

1. Name: \_\_\_\_\_
2. Father's Name: \_\_\_\_\_
3. Date of Birth: \_\_\_\_\_
4. Domicile: \_\_\_\_\_
5. Nationality: \_\_\_\_\_
6. Mailing Address (with Tel./Mob.No. and email address): \_\_\_\_\_  
\_\_\_\_\_

7. Permanent Address: \_\_\_\_\_  
\_\_\_\_\_

8. Educational Qualification:

S.No.	Course	Subject	University/Institute	Year of Passing	Division/Class

9. Work Experience:

S.No.	Organization/Institute	Post Held	Period From To	Pay/Emolument drawn*	Nature of Work	Remarks

Note: \*in case of retired, last pay/emoluments drawn

10. Details of Publications/research/documentation work etc.: \_\_\_\_\_  
\_\_\_\_\_

11. Additional information if any, which appears would like to mention in support to his/her suitability for the post: \_\_\_\_\_  
\_\_\_\_\_

12. References (upto 2-Name/Affiliation and Contact details):

(Signature)

Date \_\_\_\_\_ Mobile No.: \_\_\_\_\_ Email address: \_\_\_\_\_