19

### **NATIONAL HIGHWAYS AUTHORITY OF INDIA**

# MINISTRY OF ROAD, TRANSPORT AND HIGHWAYS

# COMMITTEE ON PUBLIC UNDERTAKINGS (2017-18)

NINETEENTH REPORT
(SIXTEENTH LOK SABHA)



LOK SABHA SECRETARIAT NEW DELHI

#### NINETEENTH REPORT

# COMMITTEE ON PUBLIC UNDERTAKINGS (2017-18)

(SIXTEENTH LOK SABHA)

#### **NATIONAL HIGHWAYS AUTHROITY OF INDIA**

# MINISTRY OF ROAD, TRANSPORT AND HIGHWAYS



Presented to Lok Sabha on 02.08.2017 Laid in Rajya Sabha on 02.08.2017

#### LOK SABHA SECRETARIAT NEW DELHI

02 August, 2017/11 Sravana, 1939(Saka)

# **CONTENTS**

COMPOSITION OF THE INTRODUCTION	COMMITTEE (2017-18) COMMITTEE (2016-17)	vii ix
	REPORT PART- I	
CHAPTER I	NTRODUCTORY	1
	. BACKGROUND ANALYSIS I. ORGANISATIONAL SET-UP II. COMPOSITION OF NHAI BOARD V. ROLE, OBJECTIVES AND FUNCT	
CHAPTER II	PERFORMANCE	8
	I. PROJECT PROGRESS II. MODES OF PROJECT EXECUTION III. HYBRID ANNUITY MODEL IV. DELAY IN PROJECT COMPLETION V. LAND ACQUISITION AND COMPOSIUS VI. ENVIRONMENT AND FOREST CLIVII. DELAY IN EXECUTION OF BOT FOR MONITORING/MAINTENANCE OF IX. SUBCONTRACTING ISSUES	DN 13 MPENSATION 18 LEARANCES 21 PROJECTS 23
CHAPTER III	FINANCIAL PERFORMANCE	27
	. RECEIPTS AND EXPENDITURE I. FUTURE TARGETS AND MOBIL FUNDS II. AUDIT ISSUES	27 LISATION OF 29 30
CHAPTER IV	HIGHWAYS OPERATIONS AND MANAG	GEMENT 32
	<ul> <li>MANAGEMENT OF TOLL PLAZAS</li> <li>ELECTRONIC TOLL COLLECTION</li> <li>ROAD SAFETY MEASURES</li> <li>CONSTRUCTION OF ROAD OV UNDERPASSES AND SERVICE L</li> <li>BRIDGE MANAGEMENT</li> <li>HIGHWAY PATROLLING</li> </ul>	N - "FASTAG" 33 34 ERBRIDGES, 37

CHAPTER V	MANPOWER	41
CHAPTER VI	NEW INITIATIVES	44
	<ul> <li>I. FOUR-LANING OF HIGHWAYS</li> <li>II. BHARAT MALA PROJECT</li> <li>III. DECONGESTION OF DELHI AND NCR</li> <li>IV. WAYSIDE AMENITIES</li> <li>V. CONSTRUCTION OF CONCRETE-CEMENT ROADS</li> </ul>	44 44 45 46 48
	PART-II	
	OBSERVATIONS/RECOMMENDATIONS OF THE COMMITTEE	51
	APPENDICES	
I.	Minutes of the Third sitting of the Committee on Public Undertakings (2016-17) held on 10.06.2016	83
II.	Minutes of the Seventh sitting of the Committee on Public Undertakings (2016-17) held on 24.08.2016	85
III.	Minutes of the Ninth sitting of the Committee on Public Undertakings (2016-17) held on 19.09.2016	88
IV.	Minutes of the Fifth sitting of the Committee on Public Undertakings (2017-18) held on 27.07.2017	90
	ANNEXURE	
	Statement of Source and Application of Funds for the year 2015-16 and 2016-17	92

# COMPOSITION OF THE COMMITTEE ON PUBLIC UNDERTAKINGS (2016-2017)

#### Shri Shanta Kumar - Chairperson

#### **Members**

### Lok Sabha

- 2. Shri L.K. Advani
- 3. Shri Ramesh Bais
- 4. Shri Biren Sing Engti
- 5. Dr. Khambhampati Haribabu
- 6. Shri Kristappa Nimmala
- 7. Shri Prahlad Singh Patel
- 8. Shri Shivaji A. Patil
- 9. Shri Ajay Nishad
- 10. Shri Ram Sinh Rathwa
- 11. Shri Narendra Keshav Sawaikar
- 12. Shri B. Senguttuvan
- 13. Shri Sushil Kumar Singh
- 14. Shri Kalikesh Narayan Singh Deo
- 15. Shri Rameshwar Teli

#### Rajya Sabha

- 16. Shri Narendra Budania
- 17. Shri Ram Narain Dudi
- 18. Shri Naresh Gujral
- 19. Shri Praful Patel
- 20. Shri A.K. Selvaraj
- 21. Shri Tapan Kumar Sen
- 22. Shri Ram Chandra Prasad Singh

# COMPOSITION OF THE COMMITTEE ON PUBLIC UNDERTAKINGS (2017-2018)

#### Shri Shanta Kumar - Chairperson

#### **Members**

#### **Lok Sabha**

- 2. Shri L.K. Advani
- 3. Shri Ramesh Bais
- 4. Shri G. Hari
- 5. Shri Rabindra Kumar Jena
- 6. Dr. Hari Babu Kambhampati
- 7. Shri Kristappa Nimmala
- 8. Shri Ajay Nishad
- 9. Shri B. Vinod Kumar
- 10. Shri Prahlad Singh Patel
- 11. Prof. Saugata Roy
- 12. Adv. Narendra Keshav Sawaikar
- 13. Shri Ravneet Singh
- 14. Shri Sushil Kumar Singh
- 15. Shri Rameswar Teli

#### Rajya Sabha

- 16. Shri Narendra Budania
- 17. Shri Naresh Gujral
- 18. Shri Shamsher Singh Manhas
- 19. Shri Praful Patel
- 20. Shri A.K. Selvaraj
- 21. Shri Tapan Kumar Sen
- 22. Shri Ram Chandra Prasad Singh

#### **Secretariat**

Smt. Sudesh Luthra - Additional Secretary
 Smt. Anita B. Panda - Director
 Shri G.C. Prasad - Deputy Secretary
 Shri Yogendra Singh - Committee Officer

#### **INTRODUCTION**

- 1. I, the Chairperson, Committee on Public Undertakings (2017-18) having been authorized by the Committee to submit the Report on their behalf, present this Nineteenth Report on 'National Highways Authority of India'.
- 2. The Committee on Public Undertakings (2016-17) had selected the said subject for detailed examination. As the examination of the subject remained inconclusive during the term of the Committee on Public Undertakings (2016-17), the present Committee decided to carry forward the subject so as to complete the unfinished task.
- 3. The Committee (2016-17) was initially briefed about the subject by the representatives of the Ministry of Road, Transport and Highways on 10th June, 2016. Thereafter, the Committee on Public Undertakings (2016-17) took oral evidence of the representatives of National Highways Authority of India on 24th August, 2016 and also took oral evidence of the representatives of the Ministry of Road, Transport and Highways on 19th September, 2016.
- 4. The Committee considered and adopted the Report at their sitting held on 27 July, 2017.
- 5. The Committee wish to express their thanks to the representatives of Ministry of Road, Transport and Highways and National Highways Authority of India for tendering evidence before them and furnishing the requisite information to them in connection with examination of the subject.
- 6. The Committee wish to express their sincere thanks to the predecessor Committee for their endeavours in examination of the subject.
- 7. For facility of reference and convenience, the Observations and Recommendations of the Committee have been printed in bold letters in Part-II of the Report.

New Delhi 31 July, 2017 09 Sravana, 1939 (S) SHANTA KUMAR
Chairperson
Committee on Public Undertakings

#### **ACRONYMS**

ADB Asian Development Bank

BE Budget Estimates
BOT Build Operate Transfer

BPCL Bharat Petroleum Corporation of India
BRT Backward, Religious and Tourist Places
CALA Competent Authority Land Acquisition
CPSU Central Public Sector Undertakings

CRF Central Road Fund

DMIC Delhi Mumbai Industrial Corridor

DoPT Department of Personnal and Training

DPR Detail Project Report

EPC Engineering, Procurement and Construction

ETC Electronic Toll Collection

FOB Foot Over Bridge

GDP Gross Development Project

Gol Government of India
GPS Global Positioning System
GQ Golden Quadrilateral
HAM Hybrid Annuity Model

HPCL Hindustan Petroleum Corporation of India

HQ Headquarters

IBMS Indian Bridge Management System
IEBR Internal and Extra Budgetary Resources

IFDIntegrated Finance DivisionIFIInternational Funding InstitutionsIOCLIndian Oil Corporation of India

IRC Indian road Congress

IRF International Road Federation

ISAC Independent Settlement Advisory Committee

LIC Life Insurance Corporation

LWE Left Wing Extermism

MCA Model Concession Agreement

MDR Major District Highways

MoEF Ministry of Environment and Forest

MoEF & CC Ministry of Environment, Forests & Climate Change

MoRT & H Ministry of Road Transport & Highways

NECORSE National Expert Committee on Road Safety Engineering

NGHM National Green Highways Mission

NH National Highways

NH (O) National Highways (Original)

NHDP National Highways Development Project

NHIDCL National Highways and Infrastructure Development Corporation

Limited

NPA Non Performing Assets

NPCI National Payment Corporation of India

O&M Operation and maintenance

ODR Other District Roads

OMT Operations, Maintenance and Transfer

PBFF Permanent Bridge Fee Fund PIU Project Implementation Unit

PMSSY Pradhanmantri Surakshit Sadak Yojna

PPP Public Private Partnership
PSP Private Sector Participation
PWD Public Works Department
PwD Person with Disability

REC Regional Empowered Committees

RFCTLARR ACT Right to Fair Compensation and Transparency in Land

Acquisition, Rehabilitation and Resettlement Act

RO Regional Offices

SAROD Society for Affordable Redressal of Disputes

SH State Highways

SPV Special Purpose Vehicle

TSP Tribal Sub-plan UT Union Territory

#### **REPORT**

#### PART - I

#### CHAPTER I

#### INTRODUCTORY

- 1.1 National Highways are the lifeline of the Country. They are arteries of the economic, social and cultural health of the Country which are equally important in the times of war and peace for ensuring movement of passengers and goods across the Country. They traverse the length and width of the Country connecting the National and State capitals, major ports and rail junctions and link up with border roads and foreign highways. While National Highways/Expressways constitute only about 1.7 percent of the length of all roads, they carry about 40 percent of the road traffic.
- 1.2 National Highways Authority of India (NHAI), which was set up by an act of the Parliament namely the NHAI Act 1988, has been entrusted with the responsibility of the National Highways Development Project, which alongwith other minor projects, has vested in it 50329 kms of National Highways for development, maintenance and management. NHAI's objective is to ensure that all contract awards and procurements conform to the best industry practices with regard to transparency of process, adoption of bid criteria to ensure healthy competition in award of contracts. Implementation of projects conform to best quality requirements and the highway system is maintained to ensure best user comfort and convenience. In view of the challenging task of construction, development, and management of National highways being undertaken by NHAI, the Committee on Public Undertakings selected the subject 'National Highways Authority of India (NHAI)' for comprehensive examination and report.

#### I. BACKGROUND ANALYSIS

- 1.3 In India, the policy setting, planning, development, operation and maintenance (O&M) functions in the road sector are spread across a number of agencies across various levels of Government. In line with the federal structure of India, roads are classified into National Highways (NH), State Highways (SH), district and rural roads, with various levels of Government (Central, State and local bodies) responsible for different categories of roads. At the federal level, the Ministry of Road Transport & Highways (MoRT&H) is the nodal ministry for road sector as a whole. Other Central Government entities, viz., the Ministry of Rural Development (management for centrally funded rural roads programme), the Central Road Research Institute (under the Ministry of Science and Technology), the Border Roads Organisation (under Ministry of Defence) and the Indian Road Congress (administered by MoRT&H) are also involved in development of roads.
- 1.4 The State Governments have a bulk of the financial and legislative obligations for the road sector, with development and maintenance activities executed through the respective Public Works Department (PWDs). Some States have also set up more commercially oriented Road Development Corporations, while State level nodal agencies for infrastructure development are also stakeholders in the road sector as a part of a broader mandate. Apart from the entities in the State Governments, the local Government bodies also play a role in the development and maintenance of urban /rural roads in their areas of administration.
- 1.5 The Ministry of Road Transport & Highways (MoRTH) is the nodal Ministry in the Country for the road sector. It is primarily responsible for the development and maintenance of National Highways and formulation & implementation of policies on road transport in the Country, including the administration of the Central Motor Vehicles Act. MoRTH's responsibility for development and O&M of the NH network is now shared by NHAI in part, while the remaining part is developed and maintained by the Ministry through the State PWDs. The MoRTH is also responsible for evolving standards and specifications for roads and bridges in the Country, drawing from its repository of technical information. The Indian Road Congress (IRC), under the

administration of the MoRTH, plays a key role in the development of such standards. In addition the Ministry is also responsible for the National Institute for Training of Highway Engineers (now called Indian Academy of Highway Engineers), a collaborative body of the Central and State Government to facilitate training of highway engineers.

- 1.6 Prior to creation of NHAI, the Ministry of Road Transport & Highways (the erstwhile Ministry of Surface Transport) was developing the highways through the PWDs of State Governments. The Central Government was retaining the activities pertaining to planning, approval of design and estimates, monitoring, etc., whereas the execution of projects was the responsibility of the State PWDs. It was working as an Agency System, where agency charges were paid to States for the works executed on the national highways.
- 1.7 As the Central Government had no direct administrative control over the executing agency, it resulted in anomalous situations, and Central Government had to defend State Governments in various forums, including Parliament; though having no role to play in fixation and operation of even major contracts, arbitration cases, payment of compensation to contractors, etc., resulting in direct financial commitment of Central funds. In this back drop, NHAI was created as a Statutory body through the NHAI Act 1988 by an Act of Parliament as an alternative for the Centre to take over the development and maintenance of the National Highway system. NHAI was operationalised in 1995 for development and maintenance of National Highways entrusted to it by the Government of India through Ministry of Road Transport & Highways. Apart from the National Highways entrusted to NHAI, the Ministry develops and maintains the balance National Highways through the State PWDs, as per the Agency system mentioned above. In certain cases, the State PWDs have also granted concessions to the private sector for implementing certain projects components on NHs through BOT schemes.

#### II. ORGANISATIONAL SET-UP

1.8 NHAI has a three-tier structure. The Headquarters (HQ), the Regional Offices (ROs) and the Project Implementation Units (PIUs). The PIUs, headed by Project Directors, are responsible for implementation of projects assigned to them and ROs, headed by a CGM level officer, have been set-up in various parts of the Country for decentralizing and strengthening the field level operations in NHAI. The HQ is responsible for overall supervision of the works assigned to NHAI.

#### **III. COMPOSITION OF NHAI BOARD**

- The Authority consists of a Chairman and not more than six full-time and six part-time Members.
- Chairman and Members of the Authority are appointed by Central Government.
- The four part-time (Govt) Members of the Authority include :

Secretary, Ministry of Road Transport & Highways

Secretary, Department of Expenditure,

Secretary, Department of Economic Affairs

DG (Road Development) & Special Secretary, MoRTH

- The two part-time (non-Govt) members are to be appointed from the professionals having knowledge or experience of financial management, transportation planning or any other relevant discipline.
- 1.9 On being asked about the extent of compliance of Corporate Governance guidelines issued by the Government, effectiveness, monitoring and initiatives taken by the NHAI for building a sound and desirable corporate governance system, the Authority submitted as follows:-

"NHAI is not a CPSU, but a statutory entity created through the NHAI Act 1988. NHAI has engaged M/s Deloitte Touche Tohmatsu India Pvt. Ltd. for "Corporate Governance Assessment of NHAI" with following scope of work: -

- i. In-depth review of NHAI's current Corporate Governance framework, practices and issues.
- ii. Review and summarization of Good Practices in Corporate Governance from India and abroad.
- iii. Gap identification and Recommendations for bridging them.

- iv. Strengthen existing Social Accountability And Grievance Redressal mechanisms.
- v. Promote integrity standards and good practices in the industry.
- vi. Suggestions and recommendations for strengthening and/or introducing Corporate Governance and Risk Management Practices at NHAI.
- vii. Capacity Building.
- viii. Implementation Support.

The consultant has submitted draft report on Suggestion and Action Plan which is under process".

#### IV. ROLE, OBJECTIVES AND FUNCTIONS

- 1.10 The following functions are entrusted to NHAI under the National Highways Authority of India Act, 1988:
  - a) Subject to the rules made by the Central Government in this behalf, it shall be the function of the Authority to develop, maintain and manage the national highways and any other highways vested in, or entrusted to it by the Government:
  - b) Survey, develop, maintain and manage highways vested in, or entrusted to it:
  - c) Construct offices or workshops and establish and maintain hotels, motels, restaurants and rest-rooms at or near the highways vested in, or entrusted to it:
  - d) Construct residential buildings and townships for its Employees;
  - e) Regulate and control the plying of vehicles on the highways vested in or entrusted to it for the proper management thereof;
  - f) Develop and provide consultancy and construction services in India and abroad and carry on research activities in relation to the development, maintenance and management of highways or any facilities thereat;
  - g) Provide such facilities and amenities for the users of the highways vested in, or entrusted to it as are in the opinion the Authority, necessary for the smooth flow of traffic on such highways;
  - h) Form one or more companies under the Companies Act, 1956 to further the efficient discharge of the functions imposed on it by this Act;
  - i) Engage, or entrust any of its functions to, any corporation or body corporate owned or controlled by the Government;
  - j) Advise the Central Government on matters relating to highways;
  - Assist, on such terms and conditions as may be mutually agreed upon, any State Government in the formulation and implementation of schemes for highway development;
  - I) Collect fees on behalf of the Central Government for services or benefits rendered under section 7 of the National Highways Act, 1956, as

- amended from time to time, and such other fees on behalf of the State Governments on such terms and conditions as may be specified by such State Governments; and
- m) Take all such steps as may be necessary or convenient for, or may be incidental to, the exercise of any power or the discharge of any function conferred or imposed on it by this Act.
- 1.11 When asked to furnish a detailed note on the role, functions and objectives of the NHAI along with critical analysis about the extent to which NHAI achieved its objectives, it was submitted as follows:-

"As per the NHAI Act, 1988, NHAI is responsible for project management as well as subsequent corridor management for stretches of national highways assigned to it by the Government of India (GoI).

The project management function covers activities related to construction of stretches (either new alignments or up-gradation along existing alignments). It includes break down of programmes into design/construction packages and their prioritization, project preparation, procurement of design, construction and supervision services, project monitoring and decisions on incorporation of Private Sector Participation (PSP) in programme implementation.

The corridor management function covers various activities after completion of construction on specific stretches, including routine/periodic maintenance, enforcement of regulations, and collection of user charges, access control, and provision of road side amenities, encroachment prevention, and standardization of systems across corridors.

In carrying out its role, NHAI is dependent on the outputs from the strategic planning and policy formulation function carried out by the Ministry in consultation with other Government bodies, as required. Broadly, MoRTH provides NHAI with inputs on the following:

- Budgeting for NH development as part of overall Government budget, thereby setting the broad financial parameters for large programmes of NH development, such as the Golden Quadrilateral (GQ) and the North-South and East-West corridors, including access to cess, international funding, tolls, etc.
- Developing policy with regard to models for PSP in NHs, including fiscal benefits and capital market access
- Declaration of road stretches as NHs and their subsequent entrustment to NHAI
- Inter-modal linkages as part of any integrated transport policy of the Government of India.

 Apart from the MoRTH, there are a number of other key stakeholders with whom NHAI interacts regularly to fulfill the requirements set out by its role. These stakeholders include the International Funding Institutions (IFIs) like the World Bank and the Asian Development Bank (ADB), State Government & their agencies, users of national highways and private sector contractors and other service providers."

#### CHAPTER II

#### **PERFORMANCE**

#### I. PROJECT PROGRESS

- 2.1 NHAI is responsible for development, maintenance and management of National Highways vested or entrusted to it by the Central Government and for matters connected or incidental thereto. NHAI is mandated to implement National Highways Development Project (NHDP) which is India's largest ever Highways Project, in a phased manner.
- 2.2 As regards to the status of progress with respect to NHDP, information submitted by NHAI is as under :-
  - "The Golden Quadrilateral project connecting four metros; Delhi, Mumbai, Chennai and Calcutta covering a length of 5846 Km was started in the year 2000. It was executed mainly through item rate cash contracts under the Engineering, Procurement and Construction (EPC) mode. The corridor has been completed.
  - North-South corridor from Srinagar to Kanyakumari, and East-West corridor from Silchar to Porbandar covering a length of 7142 Km was taken up in 2003. It was also executed mainly through cash contracts. Out of this, 6391 Km has been completed.
  - Development of stretches on High Density Traffic Corridors to provide connectivity to State capitals and places of tourist/economic importance with the corridors (NHDP PH III) of GQ and NSEW was initiated in 2005 on PPP mode. Out of this, a total length of 6594 Km has been completed.
  - Six laning of GQ corridor and few other high density corridors were taken up in 2006 on PPP mode. Out of this 2216 Km has been completed.
  - To provide better connectivity for economic development of towns, another 13,286 Km has been taken up for upgradation to two laning mainly on new EPC contracts."

# 2.3 Status of NHDP projects (as on 31<sup>st</sup> March 2017) is as under:

Sl. No.	NHDP Phase	Total Length (km)	Completed length (km)	Under implement ation (km)	Balance for award of works (km)
1.	NHDP Phase I (4 laning GQ, part of NS/EW corridor)	7,522	7,521	1	-
2.	NHDP Phase II (4 laning of NS/EW corridor)	6,647	6058	319	270
3.	NHDP Phase III (4 laning connection to State capitals, and other important places)	11,809	7507	2357	1945
4.	NHDP Phase IV (2/4 laning other important NHs)	13,203	3773	6373	3057
5.	NHDP Phase V (6 laning 6500 Km of GQ)	6,500	2544	1424	2532
6.	NHDP Phase VI (1000 Km Expressways)	1,000	-	184	816
7.	NHDP Phase VII (Bypasses, ring roads, flyovers)	700	22	94	584
Total		47,381	27,425	10,752	9,204

# 2.4 Details of Status of award and Completion of projects:

Year	Award under BOT (length in km)	Award under Annuity/HAM (length in km)	Award under EPC (length in km)	Total Awarded (length in km)	Total Construction (length in km)
2010-11	3058	1577	448	5083	1784
2011-12	6239	252	0	6491	2248
2012-13	950	165	0	1116	2844
2013-14	222	-	1214	1436	1901
2014-15	734	-	2334	3068	1501
2015-16	874	352	3118	4344	1987
2016-17 (Mar 2017)	422	2434	1480	4336	2628

#### **II. MODES OF PROJECT EXECUTION**

2.5 It has been informed by NHAI that, initially projects under NHDP were awarded as item rate cash contracts under EPC mode. However, Public Private Partnerships (PPP) became the main mode of delivery after the second phase of NHDP. The common forms of contracting that are popular in the Country and have been used for development of National Highways are:

- i. Item rate cash contract under EPC mode
- ii. Build, Operate and Transfer (Toll) Mode
- iii. Build, Operate and Transfer (Annuity) Mode
- iv. Special Purpose Vehicle (SPV) for Port Connectivity Projects
- v. Operations, Maintenance and Transfer (OMT) concession
- vi. Modified turnkey EPC mode
- 2.6 Salient Features of Key Implementation Modes of Project Execution :-

#### **BOT-Toll**

- Concessionaire responsible for designing, building, financing, operating and transferring the project at end of concession period.
- Provisions of VGF of up to 40 percent of total project cost by Government.
- Commercial returns to concessionaire through collection of toll revenue at Government regulated rates.
- Commercial risk taken by the concessionaire.

#### **BOT-ANNUITY**

- Concessionaire responsible for designing, building, financing, operating and transferring the project at end of concession period.
- Financial returns to concessionaire through pre-determined semiannual annuity payments made by the Government.
- Government responsible for collecting toll revenue.
- Commercial risk not transferred to the concessionaire.

#### **Engineering, Procurement and Construction**

- Concessionaire responsible for designing, building and transferring the project at end of construction period.
- Financial returns to the concessionaire through payments made by the Government.
- Government responsible for collecting toll revenue and maintaining road.
- Government handling financing risk, O&M risk and revenue risk.
- Considerable strain on Government finances until toll stabilizes.

#### III. HYBRID ANNUITY MODEL

- 2.7 During the evidence before the Committee, Chairman, NHAI apprised the Committee that in view of the problems being faced by NHAI in timely execution of projects, NHAI introduced a new mode of project execution under the PPP partnership model of infrastructure under 'Hybrid Annuity Model (HAM)'. The Committee were also apprised that during the current financial year 24 projects of worth ₹ 20000 crore covering the length of 1280 Km have been awarded under HAM. Salient features of the HAM model were give as follows:
  - "i. 40 percent of Project Cost paid to Concessionaire by Authority during construction period in five equal installments linked to project milestones.
  - ii. Balance 60 percent of project cost to be brought in by Concessionaire who also designs, builds and operates the highway for a period of 15 years after construction.
  - iii. Investment recovered by Concessionaire through Annuity payments over 15 years along with interest thereon @ Bank Rate + 3 percent.
  - iv. O&M responsibility is with Concessionaire, who received O&M payments bi-annually along with Annuity payments.
  - v. Authority collects toll and Concessionaire remains insulated from Toll Revenue Collection Risk.
  - vi. Project payments are inflation indexed."
- 2.8 When asked as to how the HAM will be helpful in reviving the interests of concessionaires in projects under PPP mode, NHAI in their reply submitted as under:-

"The awardees of HAM projects consists of a mixture of BOT Concessionaire/Agency, EPC & item rate Contractors and new bidders. Moreover, in view of assured annuity payments during operations period, HAM projects do not carry any traffic risk. Further, the construction and O&M risks are also largely mitigated through annuity payments during construction and operations phase. Hence, the HAM projects are expected to move forward in view of the diversified type of agencies and better risk allocation amongst Private agencies and NHAI/Government".

2.9 NHAI was asked to explain as to how it will ensure that the projects under the Hybrid-Annuity model are completed on time. In their reply, NHAI submitted that as per Article 12 of HAM MCA, the project completion schedule is linked to the physical & financial progress, as against BOT projects wherein the milestones are based on financial progress. Hence, the HAM projects are expected to be completed on schedule.

#### IV. DELAY IN PROJECT COMPLETION

2.10 When asked about the number of projects which have been implemented by NHAI since its inception, the Authority in their reply had submitted that as on 31st June, 2016, 388 projects were completed and 247 projects were under implementation. It was further informed by the Authority that only 55 projects were completed on or before time. On being asked about the reasons for delay and cost escalation owing to the delay in respect of each of the delayed projects, the Authority in their reply stated as under:

"The delays are primarily due to non-availability of encumbrance free land, clearances, poor performance of Concessionaire / Contractor and law and order issues. Issues are mainly related to the States and are resolved with their assistance. As regard cost overrun, in the projects the cost overrun is borne by the Concessionaire in case delay is attributable to them. In case delay is attributable to the Authority, the same is dealt in accordance with the provisions of the Contract / Concession agreement"

2.11 In this connection, NHAI was asked to clarify their policy with respect to concessionaires who could not complete the work as per the terms and conditions of contracts/concession agreement. In their reply, the Authority submitted that the terms and conditions are specific to a project and adequate penalty clauses are included in the relevant contracts/concession agreement. In addition, NHAI emphasized in their reply that these penalty provisions are adequate and do not need any modifications. However, these can be enforced only when delay is solely attributable to concessionaires/contractors.

- 2.12 On being asked whether any action has been taken by NHAI on the contractors who have not fulfilled their commitment in implementing projects and whether any firm has been delisted by NHAI for not adhering to timely completion of projects, the NHAI in their reply submitted that no firm has been so far delisted on account of delays; and defaults on account of delays are tackled as per the specific provisions of the relevant contract/concession agreement.
- 2.13 In view of the seriousness of the matter, NHAI was further asked to furnish a detailed note explaining the main impediments causing delay in projects. In response, NHAI submitted as under:

"The problems faced by NHAI in timely execution of projects are due to following:

- (I) Financing/Financial closing impediments
- (a) Lack of equity with developers. Most of the developers are predominantly family controlled business entities, having low capital base. The SPV structure of project execution, mandatory in BOT, often masks the real availability of capital with the developers.
- (b) The economic slow down seen in the last few years has caused revenue realization at much lower rates than was anticipated. Many developers had assumed higher revenues and had undertaken correspondingly high level of equity obligations. As the revenues crashed the availability of the equity even to meet existing commitments became inadequate, and none were left for future project. Hence many projects under BOT elicit no response from bidders.
- (c) Over leveraged balance sheet of the developers. Anticipating high levels of revenue growth many developers had undertaken future obligations which created overleveraging of their balance sheets.
- (d) Stress on the existing road infrastructure loan portfolios of Financial Institutions (FI's). Reduced revenue realisations affected debt servicing by concessionaires as the contracted debt servicing obligations could not be met. This caused widespread default in debt accounts. When the entire industry got affected, the lenders debt portfolio for roads came to have a disproportionately high level of default. Hence the road sector lending was red flagged by lenders.
- (e) Corporate debt restructuring has been effected in many SPV debts. Concessionaires unable to service debt had to propose to the lenders restructuring of debts.

- (f) Sectoral exposure limits of FI's getting exhausted. With the debt obligations mounting on account of debt repayment, deferment sector exposures increased, reaching the exposure limits for this sector.
- (g) Reduced growth of traffic on account of economic slowdown, restrictions on mining, decline in manufacturing and exports. Under Indian conditions the elasticity between GDP growth rate versus traffic growth rate is 1.2, which means that for every one per cent drop in GDP growth rate, the traffic growth rate goes down by 1.2 per cent. When the GDP growth rate fell from 9.5 percent to 4.5 percent, there was a corresponding drop in the traffic growth rate which affected revenue realization in projects. Further, judicial intervention resulted in mining activity in many places coming to a standstill. Many stretches got affected by the sudden ban on mining activities and the resultant drop in cargo traffic.

#### (II) Regulatory impediments

- (a) Acquisition of Land: The Central Government informed that the revised land acquisition policy is on the anvil. However, finalizing this took considerable time. The affected land owners refused to part with possession and land hence became unavailable. The Competent Authority Land Acquisition (CALA) who coordinate matters related to land acquisition is a State Government official and often it has been found that he is ill equipped to handle timely acquisition of land. Land acquisition and getting actual possession of land have proved to be time consuming.
- (b) Forest / Environment Clearances: During 2013, MoEF based on an incorrect interpretation of the Supreme Court judgment in Lafarge Case, refused environment clearance to road projects till forest clearance was not given, even where the forest area in a stretch was negligible. This was against their earlier policy under which they were permitting environment clearance except for that part of the highway involving forest clearance. No amount of reasoning could work and NHAI had to take up the matter in Supreme Court. Thereafter in March 2013 MoEF changed their policy, which currently is favourable to road projects.
- (c) Approvals for ROBs / RUBs, GADs, etc.:- Inordinate delays in approval of GADs, Non-rationalisation of ROB maintenance charges, large scale changes post GAD approval, delay in shifting of railway utilities.
- (d) State Support Agreements not in place in some States:- Some of the States are yet to sign the State Support Agreement which is essential for orderly execution of projects.
- (e) Approval for shifting of utilities:- This requires close interaction and supervision of State level entities managing utilities such as power distribution, water supply, sewerage etc. in certain cases projects have

been inordinately delayed on account of such utilities not extending the required cooperation for shifting of utilities from the corridor.

- (f) Arbitrary action by other Ministries and State Govts etc.:- National Green Tribunal stopped mining of sand which left the field open for illegal sand mining because construction had to be carried out and there was no legitimate way of accessing sand due to this ban. The cost of sand went extremely high. Restriction was placed on the mining of aggregates and on soil borrows by many State Governments. Similar handicap was faced when State Government restricted borrow areas and in mining of aggregates. "
- 2.14 As regards the steps being taken by NHAI for removal of abovementioned impediments, NHAI stated as under :
  - (a) "Project Preparation:- Much of the issues affecting project execution and delayed project execution, by hindsight, can be attributed to the fact that NHAI even before completing its requirement related to conditions precedent had awarded projects. This inordinate stress on awards without proper project preparation has been detrimental to the interest of the road sector as a whole. NHAI has decided not to award projects until all regulatory approvals are obtained for the project and the required land is available in possession to avoid post-bid delays and litigations
  - (b) In the matter of Environment and Forest clearance, after NHAI moved the Supreme Court, in March 2013 MoEF changed their policy which addressed all of NHAI's concerns.
  - (c) Dispute Resolution:- NHAI created a mechanism for speedy resolution of long pending disputes. An Independent Settlement Advisory Committee (ISAC) was formed headed by a retired High Court Judge and two members.
  - (d) Society for Affordable Redressal of Disputes (SAROD): It was found that the arbitration process, through which all unresolved disputes were tried to be resolved, was proving to be far too expensive and also highly time consuming.

Hence NHAI in association with NHBF formed a society for speedy and affordable redressal of disputes. This society is called as Society for Affordable Redressal of Disputes (SAROD) and is registered under Societies Registration Act, 1860. Builders/Contractors are the Primary members and Consultants have been made as associate members. Mainly qualified technocrats of highway sector have been empaneled as

arbitrators. It is intended that time bound completion of arbitration proceedings will now be possible.

- (e) Loans to Highway projects classified as "secured" by Lenders:-Unsecured loans are generally considered as relatively riskier and hence banks limit their exposure on unsecured loans to 15 to 20 percent of their debt portfolio. Given the high risk perception, such unsecured loans also carry higher interest rates. At NHAI's initiative, Reserve Bank of India has directed a policy shift that the Financial Institutions now should consider loans to Highway projects as secured to the extent covered by termination payment provisions under the Concession Agreements. Due to this changed classification, road sector projects would now be able to access debt funds from a larger pool for secured loans (as against the restricted pool available for unsecured loans) and also get the benefit of lesser interest rates.
- (f) Premium rescheduling :- To ensure that project execution do not suffer due to cash flow constraints, on the proposal made by NHAI, an Expert Committee under the Chairmanship of Dr. C. Rangarajan, the then Chief Economic Advisor, was constituted by the Central Government. Based on the recommendations of the Committee, the Government of India on 04.03.2014 approved the policy for rationalisation of premium quoted by Concessionaires in respect of Highway Projects. 15 projects have been till 31.07.2015 considered and approved by the Board of NHAI for grant of deferment of premium involving an amount of ₹ 8629 crore. The period during which such deferment is considered spans the period from 2014-15 to 2026-27. This facility will give breathing space for cash constrained concessionaires.
- (g) One time fund infusion by NHAI to revive the Projects:- CCEA in its meeting held on 13.05.2015 has approved the proposal for one time fund infusion to revive such languishing highway projects being executed on BOT (Toll) mode that had achieved at least 50 percent physical completion and could be quickly revived by infusion of moderate funding. NHAI will provide such funding to the projects from its on corpus earmarked for this purpose and shall charge interest at bank rate + 2 percent. The loan amount (say bridge fund) so given shall be recovered after completion of the construction and NHAI shall have first charge on the toll receivables of these projects and this would be ensured through execution of tripartite agreement between the senior lender, concessionaire and the Authority. This one time dispension is for all such projects that are languishing as on 01.11.2014.
- (h) Permitting 100 percent Equity Disinvestment in completed BOT Projects:- The CCEA approved a comprehensive Exit Policy on 13.05.2015 (Case No. 63/CCEA/2015) that permits concessionaires/developers of all BOT projects to divest 100 percent equity, two years after completion of

construction irrespective of year of award with condition that the equity so divested will be invested by the promoters in their incomplete NHAI projects.

- (i) Secruitization of future cash flow in BOT (Toll) Projects:- With a view to ameliorate the shortage of equity and improve liquidity of the prospective bidders, NHAI has granted permission (in its 94th Board Meeting held on 14.05.2013) to the concessionaire of BOT (Toll) projects, which have toll revenues significantly surplus to the repayment obligation, to raise subordinate loan upto 30 percent of TPC of NHAI on the strength of future surplus cash flows of their operational BOT road projects only. This would be after COD of the project is achieved in case of 4-laning projects and construction is completed in case of 6-laning projects. Extension of this facility is subject to certain conditions such as NOC from the existing lenders and utilization of such proceeds exclusively for investment as equity in road sector project.)
- (j) Improvement in Model Concession Agreement (MCA) for 4 laning DBFOT (Toll):- Based on the feedback received from various stakeholders such as concessionaire, consultants, financers and lenders, Developer Associations, policymakers etc., a comprehensive review of MCA for DBFOT (Toll) has been carried out by NHAI to recast and new MCA for four laning DBFOT (Toll) with the intent to address problems being faced in implementation to provide extra comfort to Lenders and Concessionaires, remove ambiguities and provide better clarity to certain provision that are prone to differing interpretations".

#### V. LAND ACQUISITION AND COMPENSATION ISSUES

2.15 Regarding the issue of delay in land acquisition, NHAI stated the reasons as under:

"The general reasons for delay in land acquisition are delay in handing over possession of land by CALA, delay in declaration of compensation awards by CALA, time taken in preparation of report / draft for declaration of acquisition notification under section 3D, non-updation of revenue records, resistance to joint measurement survey or demand for higher compensation by land owners, filing of large number of arbitration cases by land owners, resistance to work by land owners, encroachments within project ROW, religious structures within project ROW, process of transfer of State Govt. land falling within project ROW and transfer / posting of CALA during acquisition proceedings".

2.16 On being asked whether the NHAI has any mechanism for holding interaction with local bodies and public at large during the process of land acquisition, the Authority, in their reply submitted as under:-

"NHAI/CALAs follow the procedure prescribed in the NH Act, 1956 for acquisition of land. There is no provision specified in the Act for interaction with local bodies and public at large. Land is acquired in linear strips for National Highways and the alignment is usually fixed based on technical parameters. In most of the projects the existing ROW is widened / developed and therefore there is very limited scope for change in alignment. Also, after the provisions of RFCTLARR Act, 2013, relating to the determination of compensation and R&R have been made applicable to NH Act, 1956, the manner of determination of compensation is also specified."

2.17 When asked to explain the procedure regarding disbursement of compensation for the land acquired by the Authority in reply submitted as under :-

"The procedure for award of compensation by Competent Authority (LA), deposit of compensation with the said Competent Authority (CALA) and payment to beneficiaries thereafter by the CALA, is specified in the NH Act, 1956. CALAs are appointed under NH Act, 1956, and has to follow the procedure specified in the NH Act for acquisition of land. The procedure observed for publication of notifications for acquisition and determination of compensation takes its time. The process of proper identification of beneficiaries by CALA for payment of compensation, takes its time. Also, CALAs being State Govt. revenue officers discharge other responsibilities under the State Govt. and therefore, disbursal of compensation to beneficiaries takes some time".

Further as per the Annual Report (2015-16) of the Ministry of Road Transport and Highway for the purpose of monitoring and expeditious settlement of issues pertaining to land acquisition, guidelines have been circulated to constitute Land Acquisition Cells. Such LA Cells have been constituted in the Ministry, NHAI, NHIDCL and their regional offices/projects implementation units.

2.18 During the evidence before the Committee, the Chairman, NHAI highlighted the problems being faced by the Authority with respect to disbursement of compensation as under:

......In the case of Uttar Pradesh, even today almost three - four thousand crore rupees were stacked in various districts, which were not disbursed since the district administration was not able to speed up the process as needed. Even in Varanasi, about two and half thousand crore rupees are stacked there. Such a situation prevails while the 10 percent of the disbursed amount is given to the district administration the State Government as administrative charges. The disbursement of compensation is a difficult matter. Eastern Peripheral Corridor under monitoring by the Hon'ble Supreme Court has been constructed up to 13kms on the orders of the Supreme Court. This corridor has been constructed on the land of three districts of Uttar Pradesh namely Ghaziabad, Gautam Budh Nagar and Bagpat and three districts of Haryana namely Sonipat, Palwal and Faridabad. I had to file an interlocutory petition before the Hon'ble Supreme Court through the Attorney General of India about disbursement of compensation. Some farmers are creating hindrance although we have got land as per the Act of NHAI. The Supreme Court has directed the State to facilitate the occupation of land of NHAI in view of the target set by the Supreme Court."

2.19 With regard to the determination of the quantum of compensation for acquisitions under NH Act 1956, it was further submitted by NHAI that with effect from 1 January 2015, the quantum of compensation for acquisitions under NH Act 1956 is to be determined in accordance with provisions specified in sections 26 to 29 of RFCTLARR Act, 2013 and the First Schedule of the said Act, 2013.

Further Section 24 of the Act provides that land owners whose land had been acquired under the old Land Acquisition Act will be entitled for compensation as per the Provisions of the New Land Acquisition Act, if the land acquisition proceedings had been initiated under the old Act but either the amount of compensation has not been paid to the land owner or physical possession of the acquired land has not been taken.

During the evidence of the representatives of NHAI, the Members also raised problems faced by the farmers on account of different rates of compensation under old and New Land Acquisition Acts. In this connection, the Committee also desired to know the steps being taken by NHAI to resolve the disputes pertaining to determination of compensation under old and New Land Acquisition Acts. The Chairman, NHAI responded to the gueries of the Members as under:

"......the matter of land acquisition is really a very complicated matter. Earlier compensation was paid at previous rates. Since when a new land acquisition legislation was enacted, compensation was paid at new rates. But a number of challenges have come up and numerous discrepancies have been brought to our notice. A number of cases have been filed in various courts. Earlier, people used to hesitate in letting their land to be acquired. When they agree for the same and accept compensation, they move to the courts and file cases against acquisition and about compensation. When we occupy their land physically, they do not allow the work to be started thereon if not satisfied with amount of compensation. Today a new act has been implemented in this regard and the rate of compensation raised to two and half times more as compared the previous fixed ones. We have to spend ₹ 9000 crore for acquisition of lands for two years. We have acquired 10,000 hectares of lands and have to bear total ₹ 19000 crore."

2.20 The Committee were further informed that in order to avoid post bid project delays and litigations owing to the lack of requisite regulatory approvals, the NHAI has decided not to award projects until all regulatory approvals are obtained for the projects and the required land is available in possession. In this connection, NHAI was asked to furnish the number of projects which have been awarded after this decision. The NHAI in their reply has submitted as under:

"Provisions regarding LA and regulatory approvals were in existence. However, to expedite awards of work these provisions were relaxed on the assumption that by the time appointed date is declared, NHAI would arrange requisite clearances. Having experienced that we failed to arrange land and /or clearances, recently NHAI decided to strictly enforce provisions related to LA and clearances. During the current year 26 projects covering 1502 km length have been awarded following above principle"

#### VI. ENVIRONMENT AND FOREST CLEARANCES

2.21 Delay in obtaining requisite regulatory approvals pertaining to Environment and Forest clearances was also cited by NHAI as one of the important factor causing delay in timely completion of projects. As per the information submitted by NHAI, inherent timelines in the statutory processes, linking of different clearances as a prerequisite to each other and imposition of impractical conditions by statutory

authorities are the main reasons which have delayed the timely completion of projects.

- 2.22 However, it has been informed by NHAI that in recent years, the Ministry of Environment, Forests & Climate Change (MoEF&CC) has streamlined the clearance process and taken various steps in reducing the time taken for clearances. A brief description of steps taken by MoEF & CC is given below:
  - (i) "Process of environment clearance and forest clearance was delinked by MoEF facilitating parallel processing of clearance proposals.
  - (ii) Process of forest clearances has been delinked from wild life clearance if the activities fall beyond the boundary of Protected Area. Even within the Protected Area, Forest Clearance is now processed simultaneously upto the level of State Government.
  - (iii) The requirement of specific ToRs for highway widening projects has already been dispensed with.
  - (iv) The threshold for triggering the requirement of environment clearance has been relaxed up to the limit of 100 km length. In addition, above this length, projects requiring additional land acquisition up to 40 m for widening and up to 60 m on the realignments are also exempted.
  - (v) MOEF has delegated the powers of issuing forest clearance for linear projects to Regional Empowered Committees (RECs).
  - (vi) MoEF has issued guidelines to treat the First Stage Forest clearance as the working permission for cutting of trees and commencement of work if the funds to meet the statutory conditions are deposited.
  - (vii) MoEF has advised the State Governments not to impose additional conditions over and above those stipulated in the Forest Clearance.
  - (viii) The requirement of taking the consent of Gram Sabhas under the Forest Rights Act, 2006 was waived off for linear projects. However, a certificate of the concerned district collector is still required along with the mandatory submission of records of meetings of Gram Sabhas and various other Committees.
  - (ix) Environment clearance for borrow areas was linked with the environment clearance and, therefore, separate clearance was not

- required for borrow areas. However, subsequently, due to the intervention of the Hon'ble Supreme Court, this relaxation has been withdrawn.
- (x) Hon'ble Supreme Court has dispensed with the requirement of filing application before the Court for Wildlife Clearance. Now, projects recommended by NBWL stand cleared unless the Central Empowered Committee observes otherwise".
- 2.23 When asked as to what extent delays in project completion have led to escalation in costs, NHAI stated that there is no cost escalation involved in the BOT projects. However, cost overrun is applicable only to EPC contracts. In such contracts, there is a provision for payment of escalation due to delay. In case the project is delayed due to reasons attributable to the contractor, liquidated damages are to be imposed and no escalation is paid. Actual escalation due to delay or cost overrun will be known only after completion of the project and final settlement of bills.
- 2.24 On being asked about the cascading effect of delays and cost overruns on the aims and objectives of each of the projects, the NHAI stated about the cascading effects of such delays as follows:
  - i) "Revenue loss to the Government on account of delay in collection of toll fee.
  - ii) Cost overruns and consequential claims by affected concessionaires.
  - iii) Delay in completion of projects causing inconvenience to public/road users."

#### VII. DELAY IN EXECUTION OF BOT PROJECTS

2.25 It has been observed that Kelkar Committee constituted by the Ministry of Finance has *interalia* recommended that PPP model should not be used as first delivery mechanism without checking the suitability for a particular project. Kelkar Committee has also recommended for constitution of a Infrastructure Projects review Committee to examine the performance of PPP projects and legacy issues associated with these projects. When asked about the challenges related to PPP projects particularly BOT projects, NHAI has stated that there are challenges relating

to pre-construction activities, specifically acquisition of land, forest and environment clearance apart from non-availability of equity with the developers. Currently, the response in the PPP projects is not encouraging. No bids have been received in large number of BOT projects. NHAI, through MoRTH, is re-visiting its strategy to move from BOT to turnkey EPC mode - in order to revive the sector.

- 2.26 NHAI has informed in their post evidence replies that it has allowed 100 percent of equity divestment for construction of all BOT projects. Also, there are instances where profit margin of the concessionaires of BOT projects have increased manifold due to certain factors like huge increase in the volume of traffic. In this connection, when NHAI was asked whether they have thought of any policy initiative while allowing 100 percent equity divestment to ensure that O&M takes place and that corrections or even major structural fallouts that happen or are detected for next few years, are corrected by the concessionaires, the Authority in their post evidence reply informed that no delayed project under BOT-toll are abandoned and the project are re-structured on termination and alternative actions are taken to complete the projects.
- 2.27 When asked as to why most of the stressed project are under the BOT mode, the NHAI, in their reply stated as under :

"In BOT mode, the technical and commercial risks (such as rate of growth of traffic) are to be borne by the concessionaire. Hence, there is a direct impact on the project viability of any *force majeure* event such as Economic slowdown and / or lower traffic. However, BOT still remains the preferred mode because it allocates the risks to the parties that are best suited to manage them".

#### VIII. MONITORING/MAINTENANCE OF PROJECTS

2.28 When asked about the system put in place by NHAI for day to day monitoring of projects under construction, the NHAI in their replies submitted as under:

"There is a well-established mechanism for monitoring / testing of quality of construction /development of work of NH/Road by engaging a Consultancy firm of International/National repute for every project having several experts

who are deputed at each project site including adequate support from consultancy firm HQ, known as Supervision Consultant / Independent Consultant / Authority Engineer and they supervise / monitor / conduct testing of quality of work as per procedures laid down in various codes published by IRC, manuals & MoRT&H specifications for Road and Bridge works and NHAI Quality Manuals etc;. They are responsible for Quality Assurance of the entire project by conducting several testing of the materials to be used in projects, methodology and process as per the provisions of specification and standard of MoRT&H & IRC on day to day basis. Apart from this, Quality Division of NHAI conducts inspection at various project sites regularly to monitor the quality of work. Further, Quality Auditors are also engaged from time to time for conducting Quality Audits of the project work. In case of specific complaint/grievance, immediate action for inspection of site is conducted and issue is resolved in the earliest possible time by taking appropriable measures.

Additionally, NHAI is engaging Consultants for conducting Independent Quality Audit on the ongoing National Highways Development Project. These agencies will act as a third party independent body to carry out quality audit of various project, over and above monitoring of quality of road independently by Supervision Consultant / Independent Consultant / Authority Engineer".

To further strengthen the monitoring and accountability mechanism with respect to construction and maintenance standards of roads, the Government has incorporated suitable provisions in the recently introduced Motor Vehicle (Amendment) Bill 2017. Clause 83 of the Bill provides that any designated authority, contractor, consultant or concessionaire responsible for the design or construction or maintenance of the safety standards of the road shall follow the design, construction and maintenance standards, as prescribed by the Central Government and failure on the part of the responsible designated authority, contractor, consultant or concessionaire to comply with standards shall be punishable with a amount extended up to ₹ one lakh.

It is noticed from the information furnished by NHAI that against the budgetary entitlement of ₹ 1128.48 crore under the head 'fund of maintenance in 2016-17, ₹ 100 crore was actually released.

#### IX. SUB-CONTRACTING ISSUES

2.29 In many cases of road construction projects, the main contractors sublet the tenders to the sub-contractors after retaining their margins which results into degradation of quality of work and delay in completion of projects. When the Committee asked NHAI to explain the impact of sub-contracting over quality of work and timely execution of projects, NHAI conceded that Concession agreement / Contract agreement provides for EPC/ sub-contracting. However, the Concessionaire/ Contractor remains fully responsible for the performance of the Contract / Concession.

# **CHAPTER III**

#### FINANCIAL PERFORMANCE

#### I. RECEIPTS AND EXPENDITURE

3.1 A statement showing the total receipts and total expenditure incurred by NHAI during the past five Financial Years is given as under:-

### Funds Received by NHAI from 2012-13 to 2016-17

(₹ in Crore)

		2012-13	2013-14	2014-15	2015-16	2016-17
	Particulars					
Α	Receipts					
(i)	From Budgetry Support					
	Cess	6,003.00	6,857.45	6,885.89	15420.00	2326.50
	Plough Back	1,777.00	4,770.00	5,448.00	6500.00	7500.00
(ii)	From Additional Budgetery Support Funds for NH(O)	2,028.97	850.40	600.00	370.27	5409.02
(iii)	Funds through IEBR			-		
	Capital Gain Tax Exemption Bonds u/s 54 EC of Income Tax Act	2,902.07	2,942.13	3,343.40	4281.17	5518.92
	EAP Grant	-	-	-		0.00
	GOI Loan	-	-	-		0.00
	ADB Direct Loan					0.00
	Other Loan (Loan/Overdraft from Bank)	-	-	-		0.00
	Tax Free Infra Bonds (10 Years &15 Years Tenure)	-	5,000.00	-	19000.00	0.00
	Taxable Bonds (25 Years Tenure) 2016-17					10000.00
	Taxable Bonds (5 Years Tenure) 2016-17					9045.00
	Taxable Bonds (30 Years Tenure) 2016-17					8500.00
(iv)	Others			-		
	Funds for Maintenance	343.56	72.05	100.01	99.99	100.00
	Capital Receipts (Negative Grant, BG Encashment, LD, Penality, etc)	76.32	156.07	107.70	118.92	134.38
	Interest Receipts on unutilised capital	974.82	1,092.96	1,107.26	967.59	1141.19
	Total Receipts (i+ii+iii+iv)	14105.74	21741.06	17,592.27	46,757.94	49,675.01
B.	Opening Balance (as on 1st April)	11002.11	7730.06	8869.81	2672.35	6740.80
	Total Available funds	25107.85	29471.12	26462.07	49430.29	56415.81

# Expenditure incurred by NHAI from 2012-13 to 2016-17

<u>(</u>₹ in Crore)

		2012-13	2013-14	2014-15	2015-16	2016-17
Particulars		Total	Total	Total	Total	Total
Α	Project Expenditure					
(i)	CWIP- Land Acquisition	5,404.07	7,793.55	9,097.88	21933.85	17598.44
(ii)	CWIP- Utility Shifting	605.83	589.90	585.04	867.18	1446.86
(iii)	CWIP- Others & Pre-Construction Exps.	629.73	965.79	555.84	841.27	885.67
(iv)	CWIP- Civil Work	2,517.67	3,040.95	3,077.54	5538.70	11164.20
(v)	IE/Supervision Consultants Payment	324.21	322.75	295.27	296.03	373.59
(vi)	Grant Paid	2,524.61	1,867.56	1,110.45	1411.20	2204.17
(vii)	Annuity Payment	1,883.58	2,021.08	2,261.24	3618.79	3560.73
	Total Project Expenditure (CWIP)	13889.70	16601.58	16,983.26	34507.02	37233.66
В	Increase in Advances to Contractors, Consultants and Deposit works to Govt. Deptts				0.00	8272.89
С	Maintenance Expenditure	480.31	487.24	1,179.55	1326.52	888.47
D	Investment in Subsidiaries (SPVs)	65.83	10.56	7.22	0.28	96.17
Е	Funds released to SPVs against Plough Back of Toll			37.73	69.56	44.78
F	Repayment of Loans & Borrowings			-		
(i)	GOI Loan	516.85	339.00	-		0.00
(ii)	ADB Loan ( -ve represents adjusted Exchange Loss)	(14.60)	(38.37)	6.84	1.59	48.19
(iii)	Loan from Banks	-	-		0.00	0.00
(iv)	Redemption of 54 EC Bonds	1,153.63	2,160.11	2,511.52	2902.07	2942.13
G	Interest and other expenditure on bond issue	1,235.82	1,404.47	1,780.87	2227.70	3252.27
Н	Interest Expenses on GOI Loans, etc.	116.49	25.55	-		0.00
I	Administration Expenditure (Net of Receipts)	159.42	189.24	206.43	228.90	247.82
J	Difference between changes in Deposits, loan & advances and Current Liabilities & Provisions	(229.99)	(583.85)	1,059.79	1420.86	-1097.17
K	Revenue Exps out of Grant/Expenditure on WB (TA)	-	1.44	4.45	6.21	6.37
L	Purchase of Fixed Assets	4.33	4.34	12.05	-1.22	5.55
Υ	Total Expenditure (A to J)	17,377.79	20,601.31	23,789.72	42689.49	51941.13
	Closing balance as on 31 March	7730.06	8869.81	2672.35	6740.80	4474.68

3.2 NHAI is a statutory entity created through an Act of Parliament for development and maintenance of National Highways. Elaborating upon the financial nature and format of income-expenditure accounts being maintained by it, the Authority submitted as under:

"NHAI is constituted by an Act of Parliament titled the National Highways Authority of India 1988 Act. As per Section 12 of the NHAI Act 1988, the functions of the Authority is to develop, maintain and manage the National Highways and other Highways vested in or entrusted to it by the Government of India. This function is discharged by the NHAI out of the funds provided by the Government of India through budgetary allocations. All the toll collections made by the NHAI, negative grant, premium etc. collected by the NHAI is deposited in Consolidated Fund of India on daily basis. NHAI is the 'Executing Agency' of the Government of India for development and maintenance of National Highways and other activities connected therewith or incidental thereto. The NHAI is a non-profit making organization and is assessed to income tax as 'Charitable Trust.' The entire income of the authority, if any, is exempted from income tax under section 10(23)(c)(iv) of the Income Tax Act 1961.

The authority prepares its accounts in the format of accounts prescribed by the Comptroller and Auditor General of India. The entire expenditure reflected in the Profit & Loss Account comprises of administrative and establishment expenses. The income of the authority mainly comprises receipts from sale of tender documents. The NHAI has no other manufacturing/trading/operating expenses and also no other sources of income. The NHAI meets its expenditure out the funds provided by the Government of India by way of allocation in the Union Budget. The authority has no manufacturing/trading/operating expenses/activity and has also no operating income. Since NHAI's main activity is to develop maintain and manage national highways, the entire excess of expenses over income is capitalized as per accounting policy followed by the NHAI since inception and also as per Accounting Standard No. 10 issued by the Institute of Chartered Accountants of India. This fact has also been duly disclosed in the half yearly results so published by way of note which reads 'Based on Accounting Policy net expenses are capitalized;. This is done at the time of preparation of final Annual Statement of Accounts of the authority".

### II. FUTURE TARGETS AND MOBILIZATION OF FUNDS

3.3 Ministry of Road Transport & Highways have set a target of 25,000 km of National Highways to be awarded in 2016-17. Of the total length of National Highways targeted for award, 15,000 km would fall under the target of National

Highways Authority of India (NHAI) and 10,000 km under the target of the Ministry and National Highways and Infrastructure Development Corporation (NHIDCL). NHAI's target for construction has been fixed at 8000 km while for the Ministry and NHIDCL, the target is 7000 km.

- 3.4 In view of the Ministry of Road Transport and Highways' ambitious targets of awarding projects for another 25,000 km during the financial year 2016-17, NHAI had planned to raise more than ₹ 50000 crore through Internal and Extra Budgetary Resources( IEBR) apart from regular budgetary allocations. However during the financial year 2016-17, amount of ₹ 33063.92 cr was actually raised through IEBR. Further, ₹ 59279 crore has been allocated again to NHAI to be raised through IEBR at the BE stage for the year 2017-18.
- 3.5 On being asked about the merits and demerits of raising funds through Bonds with special references to tax and interests, NHAI explained as under:
  - "Funds raised through bonds are for longer maturity period up to 30 years.
  - Borrowing through bonds is cheaper than other mode of borrowings like bank loan etc.
  - Borrowing through taxable bonds does not burden Government exchequer as the interest is taxable.
  - Institutions like EPFO and LIC are interested to make investment in longterm bonds in Infrastructure sector.

### III. AUDIT ISSUES

3.6 It has been noticed from the Annual Report 2013-14 and 2014-15 that Audit had found several discrepancies in the accounts of NHAI in their Audit Report no.36 of 2014 on implementation of Public Private Partnership Projects in National Highways Authority of India. As the matter had not been resolved Audit had issued a disclaimer certificate stating that it is not able to take a firm opinion whether the financial statement of NHAI is true or fair. In view of this NHAI was asked to furnish their comments. NHAI in their comments stated as under:-

"These disclaimers were discussed with C&AG officials and have been replied by NHAI. C&AG comments and management reply thereon have been included in the Annual Report 2013-14 and 2014-15 of Authority

and the same have been laid before each House of Parliament. The disclaimers issued by C&AG were discussed with them and with mutual consent it was decided to appoint a financial expert and refer the whole gamut of issued raised by the C&AG audit to the expert so that the issues may be resolved. Accordingly, an expert namely M/s KPMG was appointed, they were asked to submit their recommendations on the issues raised by C&AG. M/s KPMG have submitted their report in the month of January, 2016. NHAI have shared M/s KPMG's advisory report with MoRTH and the office of C&AG. After going through the advisory report submitted by KPMG, Dy C&AG pointed out nine more issues and wanted NHAI to refer them to M/s KPMG for expert advice and their recommendations thereon. Dy C&AG also appointed a five member committee consisting of following members:-

- (i) Director General (Commercial Audit) O/o C&AG of India, New Delhi
- (ii) Pr. Director of Commercial Audit & ex officio Member Audit Board 1, O/o C&AG of India
- (iii) Additional Secretary & Financial Advisor, MoRTH Member (F), NHAI
- (iv) Representative from M/s KPMG

The Committee has been requested to analyze the advisory report of M/s KPMG and also nine additional issues pointed out by C&AG and suggest an action plan so that the financial Statements of NHAI for the year 2015-16 are appropriately finalized in time. The Committee is deliberating the issues referred to it...".

#### **CHAPTER IV**

# HIGHWAYS OPERATIONS AND MANAGEMENT

### I. MANAGEMENT OF TOLL PLAZAS

- 4.1 In view of the problems being faced by the users at toll plazas such as traffic congestion, misbehavior by toll collection staff etc, payment of user charges even for the uncompleted road projects etc., the issues were raised during all the sittings of the Committee held on the subject. The Chairman, NHAI assured the Committee that necessary remedial steps would be taken to address the issues pertaining to management of toll plazas keeping in view the convenience of users.
- 4.2 When asked to explain as to how the NHAI proposes to work with States and Ministries to identify the problems at various check posts where multiple agencies collect tolls such as State excise tolls and forest tolls, it was informed by NHAI that a comprehensive study by M/s AT Kearney is currently underway under World Bank assistance to address logistics efficiency enhancement; this includes addressing the bottlenecks at inter State check points.
- 4.3 When asked to clarify the impact of collection of toll due to introduction of GST in near future, the Authority clarified that GST is expected to have a positive impact on the toll collections as the difficulties faced at inter-State checkposts are likely to be reduced.
- 4.4 Regarding the role of NHAI in recruitment and manning of staff at toll plazas, the Authority submitted the following information :-

"The fee plazas on PPP project (BOT/ OMT) are operated and manned by the private concessionaire as per the provision in concession agreement. In respect of public funded/EPC/BOT (Annuity) projects the user fee is collected by NHAI by engaging contractor and the staffs manning the fee plaza are recruited/mobilized by the contractor as per the terms of contract agreement."

#### II. ELECTRONIC TOLL COLLECTION - "FASTAG"

4.5 As per information furnished by NHAI, it has rolled out cashless payment (FASTag) by implementation of Electronic Toll Collection (ETC) on a pan India basis w.e.f. 25.04.2016 and till 30.06.2016, 334 fee plazas located on various developed national highways sections have been made active and operational. When asked about the details of the FASTag initiative, NHAI stated as under;

"The implementation of the scheme is at initial stage and 19,665 number of FASTags have been issued so far and the number is expected to increase in the near future due to the following:

- (i) Gol/NHAI has announced 10 percent cashback to the FASTag users during FY 2016-17
- (ii) With effect from. 31.07.2016, NPCI (National Payment Corporation of India) is likely to integrate their CCH with more number of Banks participating, which is likely to ramp up FASTag issuance and transactions of electronic tolling.
- (iii) Initially on Delhi-Mumbai & Mumbai-Chennai corridor, one lane at fee plaza is being designated as ETC land and only FASTag enabled vehicles would be allowed in that lane.
- (iv) Gradually all exemptions/concessions may be made available only through FASTag.

The initiative is not aimed to increase the revenue collection rather the same has been taken up to ease congestion and provide seamless travel (near non-top movement of vehicles) through the fee plazas and convenience of cashless payments of user fee with nationwide inter operable Electronic Toll Collection System. The increased participation of users in the programme, and use of FASTag shall reduce traffic congestion and increase user convenience in making payments without stoppage at fee plazas thus saving on time, money and fuel. The online participation shall improve transparency of toll transactions and reduce improving overall efficiency and leakages thus commercial competitiveness".

4.6 The Committee inspected ETC on the Bandra-Worli Sea Link during their study visit to Mumbai in October, 2016 and noted the procedures to collect toll from the passing vehicles using FASTag facilities, while computerised monitoring was being conducted in ETC simultaneously. The Committee observed that the process

was time saving and hassle-free and hence needed to be promoted among roadusers by NHAI.

# **III. ROAD SAFETY MEASURES**

- As per a Report of the Ministry of Road Transport and Highways on 'Road Accidents in India' in 2015, the total number of road accidents have increased by 2.5 per cent from 4,89,400 in 2014 to 5,01,423 in 2015. The total number of persons killed in road accidents increased by 4.6 per cent from 1,39,671 in 2014 to 1,46,133 in 2015. Further, out of the total road accidents, 28.4 per cent accidents took place on National Highways. National Highways accounted for a share of 35 percent in total number of persons killed and 29.1 percent in total number of persons injured in road accidents during the calendar year 2015. In view of growing road accidents in India, the NHAI was asked to furnish the details of steps being taken by it to reduce the accidents on Highways. In their reply NHAI stated as under:-
  - "i. Independent safety audit has been made mandatory at all stages of the project highways i.e. design, construction, operation and maintenance. The recommendations of the safety audit are acted upon by the concerned concessionaire/contractor for removing any safety deficiency or for taking action to provide additional road safety measures.
  - ii. Black spots have been identified on all National Highways. Suitable remedial engineering measures are being taken regularly to eliminate the black spots in a regular manner.
  - iii. As an additional safety measures, necessary instruction has been issued and power delegated to all Regional Officers of NHAI to provide Foot Over Bridges (FOBs) at pedestrian crossing locations on NH, wherever required.
  - iv. As regards relief measures in case of accidents, 1033 helpline for incident Management Services such as Route Patrol Vehicles, Highway Ambulances and Cranes are being made available at accident sites on the National Highways."

4.8 When asked about the system put in place by NHAI to deal with the issues related with road safety in light of the coming up of Expressways etc, the NHAI, in their reply stated as under:

"The safety audit of the project highways by third party auditors is mandatory at all stages i.e. design, construction, operation and maintenance and it is obligatory on the part of the concerned concessionaire/contractor for complying to any safety related issues as pointed out by the auditors".

4.9 NHAI has also informed that the Pradhan Mantri Sadak Suraksha Yojna (PMSSY) has been launched as a fully centrally sponsored scheme for improvement of safety on different categories of roads viz., National Highways (NHs) and State roads i.e., State Highways (SHs), Major District Roads (MDRs) and Other District Roads (ODRs) through engineering improvement.

The details of the scheme are as under :-

"Globally Road Accidents and related fatalities have become a major public health concern. According to World Road Statistics published by International Road Federation (IRF), Geneva, there is lower incidence of deaths per hundred thousand population in Australia, Canada, France, Japan, New Zealand, Poland etc., when compared to India. Several factors such as those related to enforcement of traffic rules, road user education. road and road environment and vehicle factors are responsible for the occurrence of road accidents and related fatalities. Improving the road safety aspects of road and road environment through focused actions would be a significant contribution in making the road infrastructure safe and forgiving which reduces the number and severity of the road accidents. Ministry of Road Transport & Highways is striving to improve road safety through several measures with a target to reduce the road accident fatalities to 50 percent by 2020 in line with the target of UN decade for action on road safety. Though road safety features are part and parcel of the entire design, construction and maintenance standards of road infrastructure, concerted efforts towards specific road safety engineering improvement measures and road accident black spot rectification measures are required to achieve visible improvement in the road safety. Towards this objective. Government of India decided to launch a major initiative viz., Pradhanamantri Surakshit Sadak Yojana (PMSSY). The scheme is fully centrally sponsored scheme meant for improvement of safety on different categories of roads viz., National Highways (NHs) and

State roads i.e., State Highways (SHs), Major District Roads (MDRs) and Other District Roads (ODRs) through engineering improvement measures. This scheme is carved out of Central Road Fund scheme in operation for the development of roads including State roads. The fund requirement would be met from the allocations of Central Road Fund for roads other than rural roads. The funds allocated for road safety works would be nonlapsable. Road Safety Works for rectification of identified road accident black spots on State Roads and road safety works based on recommendations of the Road Safety Audit in order of priority would be forwarded by different States/UTs to Road Safety Cell (Engineering) in the Ministry of Road Transport & Highways along with necessary details and justification. Proposals shall be placed before a National Expert Committee on Road Safety Engineering (NECORSE) formed by the Central Government drawing the members from National level Experts in the field of Road Safety Engineering with Chief Engineer (Road Safety) as Ex-officio member secretary for their review, comments and recommendations. Terms of Reference of the expert committee would be proposed separately. The proposals found suitable would be administratively approved within the availability of resources by the Ministry. These would be implemented by the respective States and UTs as per CRF Rules. The proposals received from one or more States reviewed and recommended by National level Expert Committee would be bunched together and sent to IFD for concurrence. In case the amount involved in the bunched proposal requires EFC/SFC appraisal as per the extant guidelines the same would be followed. Road Safety Works on National Highways for rectification of identified road accident black spots and road safety works based on recommendations of the Road Safety Audit and selected road safety works out of the Annual Plans for development of National Highways would be taken up for improvement of safety on National Highways. Such works on NHs vesting in National Highways Authority of India (NHAI) and National Highways and Infrastructure Development Corporation Ltd (NHIDCL) would be carried out by the respective agencies as per the guidelines of the The road safety works on other NHs being developed and maintained through respective State PWDs would be sanctioned and implemented similar to the National Highways Original Works by Road Safety Cell (Engineering) in the Ministry of Road Transport & Highways. Proposals for rectification of identified road accident black spots based on detailed inspection of the spots by the State level committee as per guidelines, proposals for addressing safety concerns based on road safety audits and other road safety works would be processed similar to NH(O) works. The proposals from one or more States shall be bunched together and sent to IFD for concurrence. In case the bunched proposals requires EFC/ SFC appraisal as per extant guidelines the same would be followed".

4.10 As regards the road safety issues, during the evidence before the Committee, the Chairman, NHAI further informed as under :-

"Safety issues are very important. In order to ensure the safety of road users, regular safety audits are conducted by the Authority. We try to ensure that deficiencies found in safety audits are adequately rectified. However, lack of sufficient funds to be spent on the road safety issues is the biggest challenge before the Authority. If sufficient funds are made available, we will ensure that all relevant engineering features are inducted in the road design and construction. In this connection, Authority needs funds of approximately ₹20000 crore in order to ensure introduction of relevant safety features in all national highways projects".

# IV. CONSTRUCTION OF ROAD OVER BRIDGES, UNDERPASSES AND SERVICE LANES

- 4.11 Issues related to accidents due to faulty design of roads and inconvenience caused to public due to lack of additional structures, adequate number of over bridges, underpasses and service lanes prominently figured in the deliberations of the Committee. It was emphasized by the Committee that in order to ensure the right of local people to access the other side of national highways, construction of the over bridges and underpasses should be considered as the integral part of the design and construction of national highways.
- 4.12 On the issue of not providing service lanes, It has been observed that service lanes for the movement of emergency service vehicles, like ambulances and fire brigades at most of the toll plazas on the National Highways, NHAI in a written reply, clarified that the provision of service road in a project is made to cater to the local traffic demand and no fee is charged from the vehicles for the use of the service road. At fee plaza locations the service road is not provisioned as the fee paying traffic may adopt service road and cross the fee plaza without paying user fee thereby severely affecting the revenue stream and consequent viability of the NH project.
- 4.13 As stated by NHAI under the Green Highways project, there are plans for increasing road side plantation and building fences along the highways. In view of this, when asked about the plan of the authority for providing exit gates or foot over

bridges for crossing the fenced highways by the Public, the NHAI in their reply stated as under:-

"Fencing of various types ranging from tree guards for individual saplings to multi stranded barbed wire fences are recommended for road side plantations depending on the requirement of the site. However, there is no conflict on the issue of providing passage to the public wherever deemed necessary. On a high speed highway access to public is not recommended all along the stretch. However, breaks are provided in the plantation fences at appropriate places to provide access to the public across the plantations."

However, it is noticed from the information furnished by NHAI that during the year 2016-17 against the allocation of ₹ 500 cr. for the Head 'Green Highways Fund', no amount was actually received by NHAI and no amount has been allocated for the said fund for the year 2016-17.

4.14 As regards the foot-over bridges/escalators constructed by the Authority to facilitate the crossing road by people, it was informed that escalators and overhead bridges are provisioned in a project as per the site requirements.

### V. BRIDGE MANAGEMENT

4.15 In the wake of Mumbai-Goa NH bridge accident on 3<sup>rd</sup> August, 2016, in which an aged bridge collapsed leading to loss of lives, when NHAI was asked to explain the steps taken by the Authority to assess the structural health of NH Bridges, NHAI in their reply submitted as under:-

"Field units have been directed to get all the bridges inspected to ascertain their structural health. Indian Bridge Management System (IBMS) was initiated by the Ministry in 2015. The work of development of the system was initiated and completed by the appointed consultant M/s IDDC Engineers Pvt. Ltd. in six months. Inventory Data of over 1,13,219 bridges and culverts collected from all over India. Simultaneously, the work of detailed inspection and condition survey of bridges has also started. Data of about 15,000 bridges is available".

- 4.16 When asked whether any road-bridge has been identified by NHAI for rehabilitation, the NHAI has submitted that bridges requiring rehabilitation / reconstruction are identified by the DPR consultant at the time of project preparation and accordingly included in the scope of work of concessionaire/ contractor. However, taking note of the recent accident, field units have been directed to inspect all the bridges to ascertain their structural health.
- 4.17 Regarding the monitoring mechanism for such road-bridges, NHAI has informed that vide its circular dated 13.04.2016, it has asked all the ROs & PDs including concessionaire to put more attention on the safety provisions of contracts and ensure compliance of safety measures for incident free construction of bridges.

### VI. HIGHWAY PATROLLING

- 4.18 In view of the growing incidents of highway robberies and particularly, gang rape incident of Bulandshahar, NHAI was asked to explore the options of highway patrolling/highway policing on the lines of Railway Police Force for ensuring safety and security of passengers along the Highways in consultation with other stakeholders. In their reply, the NHAI submitted that though policing is a State subject other options are being explored with respect to highway patrolling, subject to legal provisions.
- 4.19 During the evidence before the Committee, Chairman, NHAI was also asked to explain the steps being taken by NHAI in order to strengthen the highways patrolling system. Chairman, NHAI stated as under:-

"We are exploring options to strengthen the highways patrolling system and planning accordingly, However, we cannot provide a powerful system on the line of police as law order issues exclusively come in the domain of State Governments. However, we are planning to evolve a system to ensure the increased patrolling on national highways in every eight hours so as to deal with issues of traffic congestions and other inconveniences to commuters. Though NHAI Act provides for the powers related to highway administration, adequate powers related to traffic management and access have not been transferred to NHAI......"

4.20 In the above context, NHAI also emphasized the need of delegation of all powers for implementation of project to NHAI once a scheme in approved in order to facilitate the construction, maintenance and management of highways. NHAI has also informed that the Ministry of Road Transport and Highways is actively considering approval in this regard which will require final approval of the Cabinet Committee on Economic Affairs.

### CHAPTER V

### **MANPOWER**

- 5.1 In a written note, NHAI informed that as on 31.3.2016, there are 1000 personnel in the organization, out of which 335 personnel are regular employees and 665 personnel are on deputation/contract basis, despite DoPT directive to provide for its own independent cadre through direct recruitment and absorption of persons on deputation. Out of the total sanctioned posts of 1432, only 1000 posts have been filled as on date, leaving a total number of 432 posts as vacant.
- 5.2 When asked about the method of recruitment adopted by NHAI and whether the present recruitment policy caters to the operational/functional needs of the Authority, the reasons for not having direct recruitment of staff despite DoPT directive and the status of creation of a permanent cadre of NHAI, the following information was furnished:-

"NHAI adopts multi-pronged approach for recruitment of personnel. The following modes of recruitment have been adopted for recruitment of personnel:-

- (i) Deputation
- (ii) Contract
- (iii) Direct Recruitment
- (iv) Absorption

The present recruitment/hiring policy of NHAI is adequately catering to the operational / functional need of NHAI.

For creating permanent cadre of NHAI, following steps have been taken during the years 2014, 2015 and 2016:

# Year: 2014

- (i) Advertised 50 vacancies for the post of Manager (Tech.) for filling up on direct recruitment with last date of receipt of applications as 16.04.2014. 37 candidates were selected for appointment, out of which 31 joined.
- (ii) Absorption to the post of Manager (Tech.) was undertaken with last date of receipt of applications as 19.12.2014. 38 officers joined in the year 2015 and 17 officers joined in the year 2016.
- (iii) One officer joined to the post of Manager (Finance.) on absorption.

# Year: 2015

- (i) Advertised 30 vacancies for the post of Dy. Manager (Tech) on direct recruitment with last date of receipt of application as 10.04.2015. 30 candidates were selected and all of them joined.
- (ii) Advertised 40 vacancies for the post of Manager (Tech) on direct recruitment with last date of receipt of application as 12.10.2015. The matter is <u>sub-judice</u>.

### Year: 2016

- (i) Advertised 3 posts of Accountant for persons with disability (PwD) (VH Category) with last date of receipt of applications as 11.04.2016. Recruitment is under process.
- (ii) Advertised 6 vacancies for the post of Assistant Manager (Legal) on direct recruitment with last date of receipt of application as 26.08.2016. Recruitment is under process.
- (iii) Advertised 1 vacancy of Accounts Officer for PwD (HH Category) on direct recruitment with last date of receipt of application as 26.08.2016. Recruitment is under process.

NHAI is making its continuous effort to increase the strength of permanent cadre in NHAI. The snapshot of the manpower position which depicts the gradual increase in the independent cadre (regular strength) of NHAI is given below:

(As on 31<sup>st</sup> March)

Year	Regular	Deputation	Contract	Total
2014	224	407	407	1038
2015	269	320	399	988
2016	335	268	397	1000

5.3 When queried about the IR and HRD policies and practices of NHAI, it was stated as follows:-

"NHAI is not an industrial unit, but a statutory body created under Act of the Parliament. NHAI is a lean officer-oriented organization, which work on the business model of outsourcing of specific tasks related to design, construction and supervision of works and subsequent management of completed corridors. The model has the following significant advantages:-

It will keep the NHAI relatively lean.

It harnesses private sector efficiencies, resources and expertise.

It provides flexibility in formulation and execution of works.

It enables speedy execution of works.

Most of the officers are on deputation and few are on regular strength. Majority of the support staff is on contractual basis. The service conditions of the officers and employees are governed by the various Regulations approved by the Authority from time to time.

In order to attract the officers and employees, NHAI has formulated various perquisites and facilities."

5.4 When asked to furnish a note on the system of redressal of grievances available to the employees of NHAI, it was stated as below:-

"The aggrieved officers and employees give their representations to the concerned officers of Admn. Division and their grievances are processed as per rules. Apart from this Member (A) has assigned a time in a week when the aggrieved officials can meet him for redressal of their grievances.

Further the Grievances Redressal Cells for Schedule Castes & Schedule Tribes and Other backward classes in NHAI have been setup. Liaison Officers have been appointed for ST/SC and also for Other backward classes in NHAI. The Reservation Cell has been setup to assist the Liaison Officers. Further a Complaints Committee to inquire into complaints related to sexual harassment of women employee of NHAI at work place has also been constituted."

5.5 When requested to explain the pros and cons of hiring personnel on deputation and contract basis, the NHAI stated as follows:

"Deputation is a mode of recruitment where individuals are borrowed from other Central / State Govt Departments / Autonomous bodies /PSUs and other Govt organizations for a fixed tenure. Hiring of personnel on contract is also made for a fixed period, but in this mode of recruitment, personnel working in private organizations can also be engaged.

The advantage of hiring personnel on deputation / contract is that the personnel can be hired keeping in view the short-term requirement of the organization, therefore, the liability of the organization towards the individuals is also for a short period. The disadvantage of hiring on deputation / contract is that due to continuous inflow/outflow of personnel, there is also loss of institutional memory."

#### **CHAPTER VI**

# **NEW INITIATIVES TO IMPROVE PERFORMANCE**

#### I. FOUR-LANING OF HIGHWAYS

6.1 According to NHAI some highways had been identified for four-laning in various States. When asked to furnish the details of the projects indicating their estimated budget and as to how the funds would be raised for the project, the NHAI stated that 50,000 kms of road projects, which is envisaged during the current financial year are at different stages of land acquisition, preparation of DPR and award. Hence, the project wise budget figure cannot be indicated at this juncture.

#### II. BHARAT MALA PROJECT

6.2 The Government of India launched Bharat Mala Project on 31<sup>st</sup> July, 2015 which aims to develop 6,000 km of new roads in border areas. In this connection when NHAI was asked to furnish details of the project including estimated costs, timelines, details of the sub-projects sanctioned so far and status of their implementation, NHAI in their reply submitted the details of Bharat Mala projects and other project launches for increasing connectivity to Backward, religious and tourist places (BRT) as under:

"Bharat Mala: 3543 Kms. of DPR was assigned to NHAI out of which 679 kms. was being done by other agencies therefore was not undertaken. As on date 2816 kms of DPR has been awarded which are likely to be completed by January 2017. An additional DPR length of 816 kms. for 3 Sections of Rajasthan has been given in July 2016 for which RFP is being issued.

- Connectivity to minor ports: DPR for 455.4 kms. (10 Ports) was assigned in May 2016 out of which 119.12 kms. are being undertaken by other agencies. 333.28 kms. of DPR bids are under evaluation. Further, 3 Ports of 82.7 kms. length have been assigned in July 2016 for which RFP is being issued.
- 2. <u>Stretches part of DMICDC (Delhi Mumbai Industrial Corridor) Stretches:</u> 110 kms. of DPR is being undertaken by NHAI which is under negotiation.

3. Connectivity to Backward, Religious and Tourist Places (BRT): Initially 4705 kms. of DPR was assigned out of which 864 kms. was not required as being undertaken by other agencies. 3163 kms. of DPR has been awarded which is to be completed by March 2017. 544 kms. of DPR is in process of negotiation and 134 kms. is under evaluation".

#### III. DECONGESTION OF DELHI AND NCR

- 6.3 As regards the decongestion of Delhi & NCR region, following projects (with status) have been proposed:
  - "Construction of 13Km. PRT System from Delhi-Haryana Border (Km.24, Sirhaul) to Sohna Chowk on NH-248A as a pilot project of PRT System – RFQ under evaluation.
  - Construction of Elevated U-Turns on Delhi-Gurgaon Border (Sirhaul) including widening of Service Roads from Ambience Mall to Shankar Chowk – DPR in progress.
  - iii. Construction of 32.200Km. Gurgaon-SPR (GSPR) from NH-8 near Ambience Mall to NH-236 meeting NSG Camp at NH-8, as an alternative route from Delhi Gurgaon Border to Manesar DPR in progress.
  - iv. Construction of Full Clover Leaf at Kherki Daula Toll Plaza (km.40.500) to connect SPR & NPR (Dwarka Expressway) DPR in progress.
  - v. Construction of Dwarka Expressway from Shiv Murti (Km.20.000) to Kherki Daula (Km.40.500) DPR in progress.
  - vi. Construction of 8-Lane Flyover with 4-Lane Underpass at Hero Honda Chowk work in progress and likely to be completed by May 2017.
  - vii. Improvement of T-Junction at Dhaula Kuan Metro Station and Defence area on Carriapa Marg on NH-8 DPR in progress.
  - viii. Improvement & Construction of Flyover / Underpass at IFFCO Chowk, Signature Tower and Rajiv Chowk on Delhi-Gurgaon Section of NH-8 in the State of Haryana Letter of Award issued on 08.09.2016 and work likely to be completed by March 2019."
- 6.4 When asked about the likely impact of the project *vis-a-vis* economy, environment and safety, NHAI has submitted that It is expected that after completion of all these projects the non-destined vehicles will not enter Delhi / NCR and as such would result in less congestion on roads and pollution level would also decrease considerably.

#### IV. WAYSIDE AMENITIES

6.5 As per information submitted by NHAI, Ministry of Road Transport & Highways has planned to develop wayside amenities along National Highways across India and asked NHAI to develop comprehensive wayside amenities for both Car and Bus passengers and heavy vehicles to provide suitable facilities for stop and rest across the National Highways Network. During examination the issue of providing approach roads at petrol pumps, hospitals, malls, public utilities etc. was also discussed so that movement of traffic on the highways is not disturbed. In a detailed note on the issue, NHAI submitted the following information:-

"The way side amenities would include parking for cars, buses and trucks separately, restaurant/food court, low cost Dhaba, telephone booth/ATM, fuel station, minor repair shop, Rest rooms/Motels for short stay. Toilets landscaping and kiosk for sale of miscellaneous sundry items, village haats to promote local products and parking facilities at an interval of about 50 Km along National Highway on sustainable economic model, on self sustainable green building concept and taking into account of socio-economic profile of the area/region. The project is planned to be developed on Public Private Partnership (PPP) Model. The Concession period is 29 years including period of construction. The Concessionaire reserves the first right of refusal on further extension of the Concession Agreement for another 29 years. The Concession will be offered to the bidder quoting the highest premium as Additional Concession Fee (Premium) + Concession fee of ₹ 100 per annum. Further, Concessionaire would have to provide basic minimum facilities at each site for wayside amenities providing parking, toilet facilities for Car/Bus passengers and truckers separately, restaurants and village Haat. MoRTH & NHAI would provide land only and all other Investments including required approvals shall be responsibility of Concessionaire. To broad base the prospective Stake holders, NHAI invited Expression of Interest from interested infrastructure/commercial/institutional developers. hospitality restaurant/budget hotel chains, oil marketing companies transport associations, leading luxury bus operators and tourism development corporations for construction, operation and management of wayside amenities on Public Private Partnership (PPP Mode) as per proposed site specific plans for identified 33 sites along National Highways in India and draft Bid Document was uploaded on NHAI website on 06.03.2016 and requested all stake holders as stated above to give their comments, if any, for further improvement in the Bid Document. An interactive meeting was also organized at NHAI HQ with all stake holders on 06.05.2016 to have detailed deliberations on the eligibility criteria and other relevant clauses in the draft Concession Agreement, before uploading the RFP Document on

website for each identified site separately. The draft RFP/DCA document duly vetted by the financial consultant incorporating the suggestions of various wings of NHAI /stake holders, with suggested policy for implementation were submitted to Ministry on 25.07.2016 for approval of the Competent Authority, subsequently detailed discussions have been done with MoRT&H officials. On receipt of the approval of the Competent Authority(MoRTH) for the draft RFP/DCA and policy in this regard, project specific bids shall be invited for 33 identified sites for which Project Specific Plans have already been made available on NHAI website. Further, it is also planned that a few sites shall be given/allotted to PSUs Oil Marketing Companies on nomination basis to give equal opportunity of developing wayside amenities as pilot project for which a meeting has been organized on 23.06.2016 with officials of Indian Oil Corporation in which the Chairman, NHAI has agreed to allot wayside amenities to Oil Company PSUs. Further, a meeting was held with IOCL, BPCL and HPCL on 14.07.2016 in which it was agreed to allot one site to them for development of wayside amenities. Subsequently, the terms and condition for allotment of wayside amenities on nomination basis to PSUs Oil Marketing Companies are under preparation with mutual consent".

6.6 When asked whether the issue of providing clean toilets at highway fuel pumps by oil companies was taken up with the Ministry of Petroleum and Natural Gas and whether the Ministry has given any response in this regard, the reply submitted by NHAI is as under:-

"NHAI has taken initiative with Oil Marketing Companies to develop/Provide clean toilets (Men/Women) and drinking water facility at petroleum Retail Outlets along National Highways and impressed upon improving the existing toilet facilities by adopting a standard design and norms to facilitate the road commuters with adequate toilet facilities at fuel stations. Further NHAI also desired to have a fixed uniform location of toilets at retail Outlet for easy accessibility. In this regard, a coordinating meeting with oil marketing companies was organised on 30.03.2016 to discuss the existing norms/guidelines for access permission to fuel stations and provide & upgrade the existing toilets facilities to standard designs as per the standard plans by naming then as "Highway Amenities" with Co-branding with NHAI and respective Oil Company. These toilet facilities are to be regularly cleaned and properly maintained by the dealer of the Fuel Station and adequate signage. The markings/ boards are to be installed prior to the retail outlet/fuel station to inform and guide the road users. In this regard, Chairman NHAI had written a D.O Letter to Secretary, Ministry of Petroleum on 05.03.2016 (copy enclosed) requesting him to issue instructions to all Oil Companies to participate in this pious endeavour to provide commuters services in line with Hon'ble Prime Minister's "Swachh

Bharat" campaign, but the reply from Petroleum Ministry is awaited. Further, all PSUs Oil Marketing Companies have in-principal agreed to provide Toilets as well as drinking water facilities in good presentable standards in all the new upcoming fuel stations and to upgrade/renovate the existing toilet facilities in good standards and maintain them properly for use of road users".

### V. CONSTRUCTION OF CONCRETE-CEMENT ROADS

6.7 In view of the long-term durability and low maintenance cost of roads constructed by cement concrete mix, the Committee desired to be apprised of reasons for not constructing more Highways with concrete-cement. In reply, NHAI stated as under:-

"The initial cost of construction of Highways with cement concrete is more than Flexible pavement. However, keeping in view the long Term Maintenance requirement of flexible pavements, life of Pavements and other life-cycle cost consideration such as longer service life, fuel consumption, resistance to extreme weather condition saving of natural material, etc and as per direction issued by Ministry Circular No. RW/NH-33044/31/2014/S&R(R)/Part dated 04.08.2014, cement concrete pavement are preferred now. In the current financial year out of 26 projects awarded for a length of 1502 kms, 17 projects are on cement concrete pavement, totaling to 967 km".

6.8 Providing a cost-benefit analysis of Bitumen and concrete roads, the Ministry, during the evidence on 6.11.2016 stated as below:

"It has been decided in the Ministry that the type of pavement to be adopted for National Highways projects should be determined on the basis of durability and life cycle cost. Considering the issues related to environment, longer service life, fuel consumption, resistance to extreme weather conditions, saving of natural resources and maintenance etc., the Cement-Concrete pavement could be the default mode of construction of National Highways. The elements required to perform a Life Cycle Cost (LCC) analysis are: (1) Design alternatives; (2) Analysis period; (3) Discount rate; (4) Maintenance and rehabilitation sequences; (5) Cost of materials. From the life cycle cost analysis of four National Highways Projects in the State of Rajasthan and Gujarat it is observed that initial capital cost of the Right Pavement is 25-65% more compared to Flexible Pavements. However, LCC of rigid pavement for 25-30 years period is 9-12% cheaper than flexible pavement option. It is presumed in the analysis that the cost of materials will escalate @8% per annum and the projected

value is discounted back @ 12% per annum to arrive Net present Value (NPV). The Variation of the price of cement vis-a-vis bitumen varies widely in different parts of the Country. This variation in price are required to be mapped out and unless there is price comparison within an acceptable limits to 20% the use of flexible pavement may perhaps required to be continued."

- 6.9 When asked if there was any proposal pending in NHAI to replace the bitumen roads made with concrete cement, NHAI stated that there was no such proposal and the decision to have bituminous or concrete road is decided on life cycle cost approach.
- 6.10 In this context the Department related Standing Committee on Commerce (2011) in their 95th Report on "Performance of Cement Industry", emphasised upon construction of roads using cement-concrete pavement. The recommendation made in the aforesaid Report, on the advantages for concrete roads over bitumen road is reproduced as under:-

"The Committee notes that there is a clear advantage for cement concrete roads in respect of saving fuel consumption vis-à-vis bituminous roads. In view of the scarce fossil fuel sources, it would be desirable to have cement concrete roads wherever other factors are favourable. The Committee is of the view that there is a vast potential for cement concrete roads in India, particularly highways. Taking into account the advantages of cement concrete roads, the Committee strongly recommends that the Government should consider constructing cement concrete roads wherever it is technically feasible. The Committee also takes note of the fact that 40 percent of the roads in developed countries such as U.S.A., West Germany etc. are made of cement concrete whereas it is only 2 percent in India. The Committee, therefore, recommends that roads and highways should be made of cement concrete bringing at par with the international norms and standards. The goal should be to reach international level. While formulating proposals for four-laning, expressway, new bypasses including forthcoming Build Operate Transfer (BOT) projects on Public Private Partnership basis, the Government should give long term construction-cum-maintenance contracts for constructing these roads. This will encourage the contractors to opt for cement concrete roads as the total life cycle cost of cement concrete roads, 75 which includes the initial cost over the designed life and other operational cost, is approximately 25-30 percent less than that of bituminous pavement".

6.11 With respect to the construction material used in construction of highways, NHAI was asked to clarify whether they have made any study regarding the durability and quality of the type of material used and its financial implications in the construction of the highways. In their reply, the Authority submitted that financial implications in the construction of Highways with respect to the type of pavement whether concrete or flexible, quality of type of material to be used and its durability etc. are being studied in preparation of detail project report (DPR) for each individual Highways project. Standards are fixed by the Indian Road Congress.

# **PART II**

# **OBSERVATIONS/RECOMMENDATIONS**

# 1. Expediting the completion of NHAI projects

NHAI, a statutory body operationalised in 1995, is primarily responsible for development, maintenance and management of the vast National Highway Network in the Country that primarily connects the hubs of major economic activities, which includes ports, manufacturing activity centres and trade centres. National Highways are the lifeline of the economic, social and cultural life of the Country. Without adequate development of road infrastructure, the progress of the Country is not possible. It is in this context, NHAI's role is very important. The Committee note that under the National Highways Development Programme (NHDP), NHAI has successfully completed the ambitious Golden Quadrilateral Project of 7522 km road length, connecting the four metros- Delhi, Mumbai, Chennai and Kolkata. Also roads measuring 6058 km, out of the total 6647 km, have been constructed under the North-South corridor from Srinagar to Kanyakumari and East-West Corridor from Silchar to Porbandar. The Committee also note that out of the total length of 47,381 km to be constructed under the seven phases of NHDP, 27425 km of roads have since been completed. While noting the status of implementation of NHDP under various phases, the Committee find that as on 31st March 2017, work for construction of 9204 km of roads out of the remaining 19956 km road length under seven phases of NHDP is yet to be awarded,

while 10752 km NH is under implementation. Long delays have become a hallmark of all Highway projects which is evident from the fact that since 1995, when NHAI was operationalised, till 30 June 2016, out of the total 388 projects completed, only 55 projects were completed on or before time. Delay in the completion of the projects is mainly attributed to long time taken in land acquisition, non-availability of requisite environment and forest clearances, poor performance of concessionaires due to economic slowdown and law & order issues etc. The Committee have also been informed that in some instances, NHAI had awarded the projects even before obtaining the required regulatory approvals and acquisition of the required land. Hence obviously these projects could not take-off and languished owing to lack of required regulatory clearances and delay in land acquisition. Nevertheless, the Committee during the examination of the subject, have been informed that a decision has since been taken by NHAI that henceforth no project would be awarded unless 80 percent of land is available with the Authority with requisite forest clearance. The Committee opine that such a decision should have been taken by NHAI early and feel that this principle should be invariably followed for awarding new projects. With the policy of environmental and forest clearance now favourable as stated by NHAI, better outcomes are expected. The Committee have also been informed that with various fiscal measures approved by the Government like rationalisation of premium, one time fund infusion for delayed projects, 100% equity disinvestment in completed BOT projects etc., NHAI would be able to ensure the time bound

completion of projects. The Committee also note that for dispute resolution and completion of arbitration proceedings, Independent Settlement Advisory Committee (ISAC) and Society for Affordable Redressal of Disputes (SAROD) have been formed, which is a welcome step. The Committee desire to be apprised of the disputes resolved by these bodies since then and the difference it has brought in the number of court cases filed against NHAI in recent years. The Committee further are of the firm opinion that since NHAI was set up under an Act of Parliament, there is a need for fixing accountability in cases where there is evident avoidable delays on the part of the contractor/ concessionaire/ officials, etc. and stern action taken. To ensure this, project wise progress with respect to the arrangement of necessary regulatory approvals and land acquisition issues should be regularly and strictly monitored by the Ministry of Road Transport and Highways during their review meetings with NHAI.

2. The Committee observe that to accelerate the construction process, the Ministry of Road Transport and Highways had set an ambitious target of awarding 25,000 km of National Highways for the year 2016-17 while the construction target was set at 15,000 km. Out of the total length of Highways targeted for award, 10,000 km was the target of NHAI and its target for construction was fixed at 8000 km. However, the Committee are disappointed to note that during the year 2016-17( as on March 2017), 4336 km of roads were awarded and 2628 km were constructed by NHAI against the targets of 10000 km and 8000 km respectively. In view of the

above, the Committee feel that despite remedial steps taken by NHAI and the Ministry to accelerate the construction process of highways, current progress of construction of highways has, perhaps, not gained the requisite momentum even during 2016-17. Hence the Committee opine that there is a need to further analyse factors hindering the progress of construction of highways during this period too. Further, taking note of the responsibility assigned to NHAI to construct new roads of 6000 KM in border areas under the ambitious Bharat Mala project, the Committee desire that the procedures should be completed in time. They desire further to be apprised of the progress made in this project at the action taken stage.

# 3. <u>Timely redressal of issues related to land acquisition</u>

The Committee note that with effect from 1st January, 2015, compensation for land acquired under NHAI Act 1956 is to be determined in accordance with provisions specified in Sections 26 to 29 of the new Land Acquisition Act namely the Right to Fair Compensation and Transparency in Land Acquisition Rehabilitation and Resettlement Act, 2013 (RFCTLARR Act, 2013) and its First Schedule. NHAI, during the course of examination, have further added that higher amount of compensation under the New Land Acquisition Act has antagonized those farmers who are entitled for lesser compensation as their land had been acquired before 1st January, 2015 under the old Land Acquisition Act. As a result, aggrieved farmers are approaching courts for reasonable compensation and litigations with respect to compensation issues have increased manifold which has further delayed the land acquisition process. Further, in some cases resentment of farmers may have serious implications for law and order situation and cause untoward incidents. While the Committee welcome the provisions relating to enhanced compensation as per RFCTLARR Act, 2013 in respect of the land acquired by NHAI under the NHAI Act, the Committee are of the view that the issues related to the timely payment of compensation need to be settled amicably with due consultation with the stakeholders.

As stated by the CMD, NHAI, during the evidence before the Committee, the cost of compensation in lieu of land acquisition has increased around 2.5 times after amendments in the Land Acquisition Act. From the figures provided to them, the Committee note that the expenditure on account of land acquisition which was ₹ 9097 cr. during 2014-15, rose to ₹ 21933 cr. during the year 2015-16 due to the higher amount of compensation proposed under the new Land Acquisition Act. In view of the rising cost of land and time taken in the land acquisition process, the Committee are of that instead of planning the highways development the view programme on the basis of present quantum of traffic, should envisage future-oriented highways development а programme keeping in view the long term requirements of the highways infrastructure so that the growth in traffic demand in future could be addressed without any difficulty.

4. The Committee note that for disbursement of compensation for the acquired land, Competent Authorities for Land Acquisition

(CALA) are appointed under National Highways Act 1956 who follow a procedure specified in the said Act. The Committee have been informed that in some States, for instance, Uttar Pradesh, despite the finalization of acquisition process long back, compensation amounts remain to be transferred into the account of actual beneficiaries. According to the NHAI, among others, the reason behind the delay in compensation in some States is inability of the district administration, which functions as CALA, to speed up the process. Though NHAI pays around 10 percent of the compensation to the district administration administrative fee for disbursement of compensation, expediting the compensation disbursal process has remained a challenging task most of the time due to the apathetic attitude of the concerned district administration. The Committee are of the opinion that disbursal of compensation in time is essential to minimise the number of court cases.

Since the resolution of issues pertaining to the timely disbursement of compensation requires support from State Governments, greater coordination is required among NHAI, Ministry of Road Transport and Highways and the concerned State Governments/District Administration/local bodies which ultimately get maximum benefits out of a highway. In this connection, the Committee appreciate that for the purpose of monitoring and expeditious settlement of issues pertaining to land acquisition, Land Acquisition Cells( LA Cells) have been constituted in the

Ministry, NHAI and their regional offices/projects implementation units.

The Committee feel that LA Cells can play a great role in expediting the disbursement of compensation by providing necessary inputs to the Central Government with respect to the delay in the disbursal process so that effective and timely resolution of the issues causing delay may be resolved in coordination with State Governments. The Committee, therefore, urge the Ministry/ NHAI to strengthen the functioning of the LA cells by delegating more powers to the Cells attached with regional offices of NHAI and urge them to act as a bridge between the public and the local bodies, so as to facilitate greater coordination between the stakeholders, State Government officials and regional officers of the Authority. This will improve the execution capacity of the Authority at the ground level with respect to the land acquisition process.

Since the resolution of issues pertaining to the timely disbursement of compensation requires support from State Governments, greater coordination is further required among NHAI, Ministry of Road Transport and Highways and the concerned State Governments. The Committee, therefore, desire that NHAI and Ministry of Road Transport and Highways should try to foster coordination with State Governments and work towards making the State Governments 'active partners' in the overall process of National Highways infrastructure development. The Committee are of the view that in order to seek cooperation of States over the issue of land acquisition and disbursement of compensation etc.

the Government should take initiatives to make the State Governments realize that speedy and time bound implementation of National Highways development projects will ultimately benefit the economy of concerned States by opening up new vistas of growth and investment.

The Committee accordingly hope that Central and State Governments will work in tandem for building a robust network of National Highways across the Country keeping in view the spirit of cooperative federalism.

# 5. PPP Model: From BOT to Hybrid Annuity Model

From the deposition of NHAI, the Committee note that poor performance of concessionaires on account of economic slowdown is a major factor responsible for delay in Build Operate and transfer (BOT) projects under the PPP model. Most of the delayed projects under the BOT mode of execution could not take-off in the wake of economic slowdown as developers were not able to finance the projects due to their over leveraged balance sheets. Further, due to reduced growth of traffic and lesser revenue realization consequently, the concessionaires could not meet their debt service obligations and defaulted in their debt accounts. As a result of the aforesaid factors, financial viability of BOT mode of projects got heavily jeopardized.

While taking note of the reasons for sluggish performance of BOT mode of projects, the Committee observe that apart from economic slow-down, sluggish performance of BOT projects can

also be attributed to deficiency in the planning and execution capacity of the Government as well as delay in acquisition of land and arrangement of requisite regulatory approvals for the projects under BOT mode. The Committee feel that the Government introduced PPP model without due planning and even without policy environment for successful creating enabling an implementation of such a model. In this connection, the Committee recall the recommendations made by the Kelkar Committee constituted by the Ministry of Finance which has inter-alia recommended that PPP model should not be used at the first delivery mechanism without checking the suitability for a particular project. Kelkar Committee has also recommended for constitution of a Infrastructure PPP Projects Review Committee to examine the performance of PPP projects and legacy issues associated with these projects. While taking note of recommendation of Kelkar Committee this Committee desire that the Government should examine the reasons for failure of BOT mode under PPP model and take suitable measures to revive the languishing projects. In this direction the Committee take note of some of the initiatives taken by NHAI to revive the languishing BOT projects. These include permitting 100 percent equity divestment after two years of construction completion for all BOT projects, equity infusion in rationalization of BOT projects and compensation concessionaire in case of delays not attributable to them. The Committee are of the view that in view of the huge cost of infrastructure development projects, there is a need to mobilize resources from sources other than Government funding and therefore, it is imperative that the project execution model under public-private partnership remains reasonably attractive for the private investors. The Committee, accordingly, support the initiatives taken by the Government to revive the languishing BOT projects by making them more conducive to the demands of private investors, and desire to be apprised of the impact of these measures on ground.

The Committee also feel that it is equally important to ensure that private investors do not manipulate the contract provisions of concession agreement to generate profuse returns at the cost of public interest. The Committee hence are of the view that it is the responsibility of NHAI to protect the interest of highway users as well as the Government in all public-private partnership contracts.

In view of the fact that most of the projects awarded under the BOT modes of PPP model could not be completed on time, the Committee find that the Government introduced a new 'Hybrid Annuity Model (HAM)' of project execution combining the main features of two prevailing models i.e. Build Operate Transfer (BOT)-Annuity & Engineering, Procurement and Construction (EPC).

In this regard, they were informed that unlike the BOT models, HAM assures better risk allocation amongst private concessionaires and NHAI/Government as 40% of bid project cost shall be payable to the concessionaire by NHAI in five equal installments linked to project completion milestones and concessionaires shall have to bear the balance 60% of bid project cost through combination of

debt. With equity and assured annuity payments concessionaires it is expected that the operations & maintenance risks during construction and operation period will be mitigated and it will also allay the apprehensions arising out of the uncertainty in traffic volume. Further, HAM projects are expected to be completed on schedule as payments to concessionaire have been linked to the project completion milestones which are based on both physical and financial progress unlike the BOT mode wherein the project completion milestone were based on financial progress only. During 2016-17, out of the total awarded projects of 4336 km by NHAI, projects of 2434 km have been awarded under HAM. The Committee are glad to learn that with HAM projects getting momentum, total length of road construction by NHAI has also increased to 2628 Km during the year 2016-17 from 1987 km during the year 2015-16.

Taking note of the successful beginning of HAM projects and interest shown by investors for these projects, the Committee appreciate the efforts of the Government to revive the PPP projects in road and highways sector with introduction of HAM. They hope that with its better risk allocation structure, interest of private concessionaire in infrastructure sector could be revived. The Committee also feel that if HAM projects are implemented with due caution, many delayed projects may be expedited and stalled projects may be revived. However, in view of the experience gained from the implementation of PPP model so far, the Committee desire that for development of highways infrastructure projects, PPP

model, be it BOT mode or HAM, should be preceded by proper planning and due assessment of the feasibility of the projects.

While the Committee expect good progress of projects under the PPP model, as is evident with the HAM mode, it is still a reality that the private sector does not prefer projects which have low profitability for them. In such projects, the Ministry has to come forward for public good. Hence the Committee recommend that the Ministry must adopt a proactive approach towards highway construction throughout the length and breadth of the Country. They have to also convince the private sector for enhanced participation in the same as better road linkage translates into better industrial performance resulting into better profits for all stakeholders.

# 6. Restriction on Sub-contracting

The Committee note that due to the Sub-Contracting by the main contractors quality of work has significantly suffered in many projects. Further, practice of sub contracting has also resulted into delay in project completion in many cases. It has been observed that the main contractor usually sublet the tenders to the sub contractors after retaining their margins which results into degradation of quality of work as they do not have enough incentives to maintain the expected level of quality.

In view of the above, the Committee are of the opinion that while it may not be practical to completely rule out the practice of subcontracting, NHAI should explore the possibility of imposing certain restrictions with respect to sub-letting of contracts, in order to ensure quality of work and timely completion of projects. This could also be done by levying of penalty on the main contractor if the sub-contractor leaves the project incomplete. Registration of sub-contracts and blacklisting of contractors may also be made mandatory to ensure that practice of sub-contracting does not affect the projects adversely. The Committee would like to be apprised about the preventive action taken in the matter.

# 7. Financial Performance

The Committee have been informed that being a nonprofit organization under the section 10(23)(C)(IV) of the Income Tax Act 1961, NHAI is exempted from income tax and is assessed as a 'charitable trust'. Likewise, financial statement of NHAI is prepared in the format of income-expenditure statement instead of profitloss statement. The Committee also note that it is the statutory obligation of NHAI to ensure that investment made by the Government in infrastructure projects yields desirable results and does not turn unprofitable. The Committee opine that if delayed projects result into cost overrun and funds raised by NHAI in the form of tax free bonds, which add to the liabilities of the Government, are not properly utilized, it is ultimately the loss of scarce Government resources. Though NHAI has clarified that only EPC mode of project implementation involves cost overrun on account of delay in project completion and there is no cost overrun in case of BOT projects, the Committee still feel that even in the modes of projects implementation which involves no cost overrun,

the cascading effect of delays may result into revenue loss to the Government on account of delay in collection of toll charges. Further, delay in completion of projects has an overall impact on the growth of economy and deprives the public of the convenience of a developed infrastructure.

In view of the above, the Committee are of the view that losses on account of delayed projects is a loss to the national economy. The Committee, therefore, recommend that being an executive agency of the Government, NHAI should strive hard to complete the projects on time in order to minimize the downside risks to the huge investment made by the Government in the infrastructure projects. The Committee also recommend that accountability mechanism in NHAI should be strengthened so as to ensure the optimal utilization of the Government's funds invested in the infrastructure projects.

## 8. **Budget Allocation:**

The Committee also note that apart from being dependent on the Gross Budgetary Support from the Government, NHAI is also exploring the opportunities to raise funds through 'Internal and Extra Budgetary Resources' (IEBR). However, at the end of the financial year it could only raise ₹ 5518.92 cr through IEBR against the budgetary provisions of ₹ 59279 cr. From the information furnished by NHAI, the Committee note that in view of the growing non-performing assets (NPAs) of banks and inability of banks to provide long term financing for infrastructure projects, NHAI is

planning to raise required funds through bond market as raising funds through these routes is comparatively cheaper and provides long term financing option for infrastructure development. Further, since institutions like EPFO and LIC are also keen to invest in long term bonds in infrastructure sector, the NHAI is exploring the opportunity of raising funds from these sources as per the broader budgetary provisions.

Taking note of the initiatives taken by NHAI to raise funds through market, the Committee are constrained to note that as per financial statement of NHAI during the last five years, huge amount of available funds were left unspent as 'closing balance' at the end of respective financial year. The same unspent amount has been shown as 'opening balance' at the beginning of subsequent financial year. This opening balance was as high as ₹ 11002 Cr., ₹ 7730 Cr., ₹ 8869 Cr., ₹ 2672 Cr. and ₹ 6740 Cr. for the years 2012-13, 2013-14, 2014-15, 2015-16 and 2016-17 respectively. Such large amount of unspent money is reflective of the NHAI's inability to optimally utilize the available funds for the development of National Highways. The Committee, therefore, desire that NHAI should review its fund management strategy so as to avoid huge amount left as unspent at the end of a Financial Year. Further, raise more funds through market since NHAI is trying to borrowing, the Committee feel that NHAI also needs to factor in its 'opening balance position' while devising its borrowing strategy for a financial year as borrowing without taking into account the status

of unspent funds will ultimately add to the liabilities of NHAI and increase the burden of interest payment.

### 9. Audit Issues

The Committee observe that the C&AG, in course of their examination of the accounts of NHAI during the year 2013-14 and 2014-15, had noticed several discrepancies in the accounts and other records of NHAI. As per Audit observations, the balance sheet and profit-loss accounts of NHAI were not drawn up in accordance with the format approved by the Government of India under NHAI Act, 1988. They further observe to their dismay that since the issues raised by Audit were not resolved, Audit had to issue a disclaimer certificate stating their inability to form a firm opinion about whether the financial statement of NHAI was true and fair. The Committee note that NHAI, as a follow up, had appointed M/s KPMG to submit a report on the issues raised by C&AG and their report is currently being analyzed by an expert committee of C&AG.

The Committee regret to note that despite being a Statutory body, the account books of NHAI were found as not being maintained in accordance with the desirable GOI standards by the C&AG for the year 2013-14 & 2014-15. Deviation from the standard accounting principles is not justified and NHAI should maintain its accounts as per the format prescribed by the C&AG so as to enable the Audit to have a meaningful assessment of the financial performance of NHAI. The Committee desire to be apprised about the comments of

the expert Committee appointed by the C&AG on the same. The Committee also urge the Ministry of Road Transport and Highways to take note of the recommendations of the said expert Committee and ensure their implementation by the NHAI so that the accounting standard of NHAI does not attract any adverse comments from the C&AG in future.

## 10. Electronic Toll Collection through FASTag

The Committee note that an electronic toll collection programme is being implemented by NHAI through the introduction of a cashless payments mechanism called FASTag at various toll plazas on National Highways. At the initial stage, specific lanes have been designated for FASTag enabled vehicles only at Delhi-Mumbai and Mumbai-Chennai corridors of National Highways. The Committee had an opportunity to witness the process on the Bandra Worli Sea link in Mumbai during their study visit and appreciate this initiative taken by NHAI. In view of the heavy vehicular traffic on National Highways, introduction of an e-tolling payment option as FASTag would help in reducing traffic congestion at toll plazas, thereby saving valuable time, money and fuel of Highway users. Further, in line with the Government's emphasis on cashless transactions, such initiatives would provide a convenient method for cashless payment of user charges at toll plazas. Moreover, the Committee feel that promotion of online payments can help maintain transparency in toll collection and prevent revenue leakages. The Committee hope that FASTag would be extended to other NH stretches in a time-bound manner and desire to be apprised about further progress on the same.

## 11. Toll Collection Without Completion of Projects

The Committee note from the information furnished by NHAI that in certain cases concessionaires have started collection of toll charges from users even without final completion of the roads. The Committee, while urging MoRTH and NHAI to detect such instances through strict monitoring, find it totally unjustified as the users are forced to pay user charges for roads which are partially completed. It also leaves no incentive for the concessionaire to complete the project on time, which results into delay in completion of projects. The Committee, therefore, desire that NHAI should finalize specific guidelines fixing the accountability of the toll operators with respect to collection of user charges. The Committee also feel that specific provisions should be made in the "Contract Agreements" itself to ensure that toll charges are made applicable only after completion of the projects and for any violation, adequate penalties should be imposed on the toll operators.

## 12. Management of Toll Plazas

The Committee observe that location of toll plazas inside the cities or densely populated areas results into chaotic traffic conditions causing pollution, traffic hazard and inconvenience to highway users and the local population. The Committee, therefore, recommend that NHAI should examine the feasibility of setting up toll plazas away from the cities/ densely populated areas in order to avoid inconvenience to public. Further, it has also been observed that in some toll plazas, most of the toll counters are kept non-operational in order to reduce the cost. In some toll plazas, users have also been inconvenienced by unscrupulous elements deployed by toll operators for collection of toll charges, who many a times misbehave with users or demand undue charges. In view of this, the Committee feel that NHAI should develop an inspection mechanism to monitor the management of toll plazas in order to ensure that users are not troubled by the toll operators/collection staff. A well trained staff needs to be deployed at toll counters and all complaints regarding the mismanagement at toll plazas should be promptly enquired and suitable action taken.

13. Further, the Committee regret to note that incidents like the gang rape near a highway in Bulandshahar, Uttar Pradesh indicate that travelling on Highways is quite risky for the users, which need to be dealt on priority. In view of growing criminal activities on National Highways, the Committee urge that CCTV cameras with adequate storage capacity should be invariably installed at all toll plazas and vulnerable places at national highways. The Committee are also of the view that NHAI should start helpline numbers and develop mobile apps, utilise the social media to encourage public involvement and enable the passengers to register their complaints with respect to poor quality of maintenance of highways, misbehavior by toll staff at toll plazas, incidents of road rages and

traffic violations and other inconveniences being faced by the passengers on national highways. NHAI should also take necessary steps to make the public aware about such helpline numbers/ mobile apps dedicated to the service of highway passengers through display boards and other mechanism installed at appropriate places. In this connection, a proposal for 'access controlled' Highways is also understood to have been under examination in Ministry of Road, Transport and Highways wherein limited and designated entry and exit points on the highways would be constructed for better safety. The Committee would like to be apprised of the decision taken on the matter.

14. The Committee have also been apprised that although law and order issues exclusively come in the domain of State Governments, NHAI is planning to evolve a system to ensure increased patrolling on National Highways every eight hours so as to deal with issues of traffic congestions and other inconveniences to commuters. Taking note of the growing security concern on Highways, the Committee recommend to consider creation of a dedicated Highway Security Force similar to the General Railway Police Force (GRP), for safeguarding the movement on National Highways. The aid of advance technologies such as geo-tagging. Global Positioning System (GPS), positioning of CCTV cameras in this direction on sensitive areas across the Highways are other steps which can enhance the efficacy of the monitoring system. The Committee would like NHAI to take action as suggested above

and furnish the details about the specific action taken in this regard.

### 15. Road Fatalities

The Committee note with concern that incidence of road deaths in India is comparatively higher as compared to other countries A Report prepared by the Ministry of Road Transport and Highways on Road Accidents in India in 2015 states that the total number of road accidents increased by 2.5 per cent from 4,89,400 in 2014 to 5,01,423 in 2015. The total number of persons killed in road accidents increased by 4.6 per cent from 1,39,671 in 2014 to 1,46,133 in 2015. Out of the total road accidents, 28.4 per cent accidents took place on National Highways. They note that Ministry of Road Transport and Highways has set a target of reducing the number of road accident fatalities to 50 percent by 2020 in line with the target of United Nations Decade For Action on Road Safety. The Committee appreciate that the Government has launched a major initiative namely Pradhanmantri Sadak Suraksha Yojna (PMSSY) to improve the safety on different categories of roads viz. National Highways, State Highways, major district roads etc through engineering improvement measures. The Committee would like to be apprised about the budgetary allocations and status of the implementation with respect to PMSSY at the action taken stage.

16. In order to reduce the number of road fatalities caused by defective designs/neglect maintenance of highways, it is inevitable to ensure monitoring of construction and maintenance standards.

In this connection, the Committee find that clause 83 of the recently introduced Motor Vehicle (Amendment) Bill 2017 in the Parliament, provides that any designated authority, contractor, consultant or concessionaire responsible for the design or construction or maintenance of the safety standards of the road shall follow the design, construction and maintenance standards, as prescribed by the Central Government and failure on the part of the responsible designated authority, contractor, consultant or concessionaire to comply with standards shall be punishable with a amount extended up to ₹ one lakh. The Committee feel that proposed Bill, if enacted, will enhance the responsibility of NHAl *vis a vis* monitoring the quality of construction and maintenance of roads under its purview as per the standards prescribed by the Government. They await the outcome of the Bill at the appropriate stage.

17. In this connection, the Committee also note that NHAI has a well established mechanism for monitoring the quality of construction work with respect to ongoing national highways projects. NHAI has a dedicated Quality Division to conduct inspection of various projects sites regularly to monitor the quality of work. NHAI also undertakes Quality Audit of the projects by independent quality Auditors/consultants. However, the Committee observe that NHAI does not have a similar mechanism to monitor the maintenance of highways work after the construction is over. Since the maintenance of the roads after construction is equally important in order to ensure the quality of roads in long run, the

Committee recommend that NHAI should evolve an effective system of monitoring the maintenance of national highways for a specified period after completion of the construction. The Ministry in consultation with NHAI may evolve the policy regarding maintenance of roads after construction whereby there is a structural mechanism for maintenance of roads.

Further, the Committee also desire that the Government should allocate sufficient funds for ensuring adequate safety norms in design and construction of Road Projects. In this connection, Chairman, NHAI during the evidence before the Committee, had highlighted the requirement of funds to the tune of ₹ 20,000 cr. in order to ensure adequate safety norms in design and construction of Road Projects. The Committee are constrained to note that out of estimated ₹ 1128.48 cr. fund of maintenance, only ₹ 100 cr. were actually released during 2016-17 as per the data furnished to the Committee. While deliberating the way maintenance issue is being ignored as is evident from the data of utilisation of funds status, the Committee strongly recommend for focused attention as maintenance of roads. The Committee desire to be apprised of the reasons for the reduction in the funds allocation to NHAI with respect to maintenance of roads as well as the allocation made for the same in the current Financial Year.

# 19. <u>Construction of additional structures on Highways : Service lanes/ under passes, etc.</u>

The Committee observe that the construction of additional structures such as service lanes, under passes and over-bridges

etc. is required to cater to the needs of the people living in peripheral areas of national highways and facilitate the entry of vehicles from the nearby cities/villages to the highways and vice versa. Ignoring their importance may lead to road accidents and haphazard traffic movements on the main highway. Further, the construction of the service lanes has an important role in facilitating the transportation of emergency vehicles such as ambulances and fire-brigades.

The Committee emphasize that national highways cannot be conceptualized in isolation without taking into account the genuine needs of the vast population which resides in nearby areas on both sides of the highways. Lack of facilities such as under passes and over-bridges put restrictions on the rights of the local population to access the other side of the roads and the same cannot be justified on the grounds of insufficient funds or financial viability of the road projects. The Committee feel that it is the responsibility of the NHAI and the Government to ensure that interests of the local population are not compromised in the process of highways development programme. The Committee also observe that NHAI's apathy towards building under passes and over-bridges causes inconvenience to public which may compel them to resort to unauthorized practices such as cutting the fences to access the other side of roads, which not only puts their own lives in peril but also causes damage to public property.

20. Another area of concern noticed by the Committee is the absence of approach roads to petrol pumps, hospitals, malls,

public utilities falling on the periphery of highways which causes heavy traffic snarls and jams on highways. The problem is compounded by haphazard parking of trucks or vehicles across highways due to lack of space that also causes traffic jams and endangers the safety of fast moving vehicles. The Committee feel that this issue needs attention and be dealt with by providing additional structures such as lanes, parking space at strategic locations, etc.

In view of this, the Committee recommend that the NHAI and the Ministry of Road Transport and Highways should ensure that provisions regarding construction of additional structures such as under passes and over-bridges are included in concession agreements and if not feasible, NHAI should undertake the responsibility of building these structures using their own funds. The Committee note in this context that NHAI has instructed and delegated necessary powers to all Regional officers to provide FOBs at pedestrian crossing locations on NH, wherever required. The Committee also recommend that NHAI may formulate specific developers/concessionaires guidelines for the to make construction of under passes and over-bridges mandatory, if nearby areas of national highways are densely populated. NHAI may fix a rational criteria regarding minimum population for which providing of additional structures would be mandatory for the concessionaire. The Committee also desire to be apprised of the progress on the Indian Bridge Management System (initiated in 2015) to collect condition survey data of all road bridges in the Country.

## 21. Construction Of Common Underground Utility Ducts

The Committee find that roads are frequently dug up for various purposes such as laying of gas pipelines, power lines, phone lines and optical fiber cables for INTERNET availability etc. Frequent digging of roads leads to inconvenience for public use causing traffic jams and water-logging, if roads remain under digging for a long period without adequate repairing. Further, repeated digging of roads and consequent destruction of road surface significantly raise the maintenance cost of the roads. In view of the above, the Committee urge the NHAI to conduct a study on the financial and technical viability of the idea of laying underground utility ducts to facilitate the installing of gas pipelines, power and phone lines and optical fiber cables etc. to reduce frequent digging of the roads. If found feasible, NHAI may plan for making the laying of common underground utility ducts mandatory for their road construction projects.

# 22. <u>Construction of cononcrete-Cement highways for better road quality</u>

The Committee are happy to note that owing to the multiple advantages of cement concrete pavement over the traditional road paving surfaces, particularly bituminous roads, construction of cement concrete pavement is now being preferred by NHAI. The long term durability, longer service life, lesser fuel consumption, and resistance to extreme weather conditions etc. are various

features that make Cement-Concrete an ideal material for highways and roads which endure very large volume of vehicular traffic. The Committee have been apprised that during the current Financial Year, out of the 26 projects awarded for a length of 1502 km, 17 projects covering the length of 967 km will be constructed on cement concrete pavement. In this connection, the Committee recall the recommendations made by the **Department** Parliamentary Standing Committee on Commerce (2011) which in their 95th Report on "Performance of Cement Industry" had stronalv advocated the construction of roads includina expressways using cement concrete pavement. In the said report, the Committee while noting that about 40% of the roads in developed Countries such as USA, West Germany etc. are made of cement concrete whereas it is only 2% in India, had recommended for construction of cement roads and highways to bring at par with international norms and standards. A cost-benefit analysis of bitumen and concrete road over 25-30 year life cycle cost in Rajasthan and Gujarat, which was undertaken by MoRTH, has suggested that the variation of the price of cement viz a viz bitumen is required to be mapped out and unless there is price comparison within an acceptable limits to 20%, the use of flexible (bitumen) pavement may perhaps required to be continued. The Committee also agree that with expansion of concrete-cement roads, it is important to undertake requisite cost research, yet feel that once the quality of concrete and cement used in construction is ensured so as to guarantee the long term durability of the roads, the savings on the maintenance would offset the initial rise in cost of construction. Considering the lesser fuel consumption, resistance to extreme weather conditions and long term durability of concrete-cement roads, the Committee recommend that in future concrete-cement may be used in construction of highways in place of bitumen as is being done in many developed countries. In places where highways cannot be constructed using concrete-cement, the reasons for these may be specified.

## 23. National Green Highways Project

The Committee note that the Ministry of Road Transport and Highways have launched the National Green Highways Project to develop green corridors along National Highways for sustainable environment and inclusive growth which envisions development of eco friendly highways with participation of various stakeholders. The Committee also note that National Green Highways Mission (NGHM), established by Ministry of Road Transport and Highways (MoRTH) under National Highways Authority of India (NHAI), has been entrusted with the task of planning, implementation and monitoring roadside plantations and building fences along one lakh kilometer network of National Highways. The Committee, while acknowledging the fact that roadside plantation have immense potential to enhance the green cover of the nation and also generate employment opportunities for rural economy, feel that this initiative is a novel step towards improving the aesthetics of highways while contributing in a big way towards environment protection which is a global concern. However, the Committee regret to note that during the year 2016-17 against the allocation of ₹ 500 cr. in Green Highways Fund, no amount was actually received by NHAI, which implies that the fund is yet to be operationalised and no work has been initiated under the National Green Highways Mission. Further, no amount has been allocated for the said fund for the year 2016-17. The Committee may be apprised of the reasons for not releasing money for the Green Highways Funds.

The Committee also desire that the Government 24. should allocate and release the required funds under the Head 'Green Highways fund' and ensure its optimum utilization for development of green corridors along National Highways. Further, the Committee insist that in course of development of Green Highways Project, appropriate exit gates for crossing the fenced highways for the public is provided at appropriate distances and places so that movement of people living in habitations on either side of not inconvenienced. The Committee thus highways are recommend the Government to vigorously follow up the project of greening of highways at all levels.

## 25. Provision of Wayside Amenities

During the course of examination of NHAI, it has come to light that the Government has planned to develop wayside amenities along National Highways across India on Public Private Partnership (PPP mode) which would include parking space, restaurant/food court, low cost dhaba, telephone booth/ATM, fuel station, minor repair shop, Rest rooms/Motels for short stay, village haats to promote

local products etc. on sustainable economic model. The Committee also note that NHAI has taken up the issue of provision of wayside amenities with Oil Marketing PSUs and that the said Companies have, in principle, agreed to provide toilets as well as free drinking water facility in good presentable conditions in all the upcoming fuel stations in line with the "Swachh Bharat Abhiyaan" campaign. However, the Committee are apprehensive of the successful implementation of the project as no information on the status of the 33 identified sites along the National Highways for the pilot project was furnished to the Ministry. The Committee would like to be apprised of the status of the work done in this regard.

## 26. Training and Human Resource Development

Taking note of the BOT model and newly introduced Hybrid annuity mode of project implementation, the Committee feel that successful implementation and effective administration of a highway project requires induction of new set of skills in those employees of NHAI who deal with various responsibilities and duties ranging from preparation of DPR to monitoring of construction work, enforcement of contracts, liaisoning with State Government officers etc. The Committee, therefore, recommend that NHAI should arrange specific training programmes for its employees to upgrade their skills so as to enable them to resolve the complex issues pertaining to implementation and management of highway projects. Further, in view of future growth potential of roads and highways sector in India, the Committee feel that a large number of civil engineers and technical experts will be required to

fulfill the demand of skilled personnel in the areas of design, construction and maintenance of roads/highways. The Committee therefore, recommend that NHAI and Ministry of Road Transport and Highways should collaborate with Ministry of Human Resource Development, Ministry of Skill Development and Entrepreneurship and premier research institutions in road construction sector such as the Central Road Research Institute etc. for promoting quality education, skills, training and research work in the field of road construction sector.

# 27. <u>Creation of Permanent Cadre of NHAI and filling-up of vacancies</u>

The Committee note that out the total sanctioned staff strength of 1432, only about 1000 staff are in position. Further, out of the 1000 staff currently employed with NHAI, 665 of them are either serving the organisation on deputation basis or on contractual basis. This implies that only about 335 staff are on the actual strength of the organization. The Committee further note that a number of vacancies in the organization are yet to be filled up and out of the 130 vacancies advertised during 2014, 2015 and 2016, only 61 persons could actually join the organization. Even in the Board of NHAI, two key posts of part-time (non-Government) Directors are yet to be filled up from the professionals having knowledge or experience of financial management, transportation planning or any other relevant discipline.

Given the high pace of growth in traffic across the Country and with so many development projects of NHAI yet to be

accomplished, it is essential that the manpower requirement of NHAI be fulfilled by making the positions more lucrative so as to attract the best talent from the industry. The Committee observe that although hiring of persons on deputation/ contract basis may have some advantages, but keeping in view the huge mandate given to NHAI and the Government's focus on development of infrastructure in the country, it is essential for NHAI to have its own permanent Cadre which will ensure dynamism, continuity in administration, management, inflow/outflow of personnel and retaining institutional memory. The Committee recommend the Government for creation of a permanent cadre of NHAI and expediting the filling-up the vacancies in NHAI.

New Delhi 31 July, 2017 09 Sravana, 1939 (S) SHANTA KUMAR
Chairperson
Committee on Public Undertakings

#### **APPENDIX I**

## COMMITTEE ON PUBLIC UNDERTAKINGS (2016-2017)

#### MINUTES OF THE THIRD SITTING OF THE COMMITTEE

The Committee sat on Friday, the 10<sup>th</sup> June 2016 from 1100 hrs to 1305 hrs in Committee Room 'D', Ground Floor, Parliament House Annexe, New Delhi.

#### **PRESENT**

Shri Shanta Kumar - Chairperson

#### **MEMBERS**

#### Lok Sabha

- 2. Shri Lal Krishna Advani
- 3. Dr. Kambhampati Haribabu
- 4. Shri Kristappa Nimmala
- 5. Shri Prahlad Patel
- 6. Smt. Krishna Raj
- 7. Shri Sushil Kumar Singh
- 8. Shri Kalikesh Narayan Singh Deo
- 9. Shri Rameshwar Teli

#### Rajya Sabha

- 10. Shri Narendra Budania
- 11. Shri Ram Narain Dudi
- 12. Shri Naresh Gujral
- 13. Shri Tapan Kumar Sen

#### **SECRETARIAT**

1.	Smt. Sudesh Luthra	Joint Secretary
2.	Smt. Anita B. Panda	Director
3.	Shri G.C. Prasad	Deputy Secretary

### MINISTRY OF ROAD, TRANSPORT AND HIGHWAYS

1.	Shri Sanjay Mitra	Secretary, MoRTH
2.	Shri Rohit Kumar Singh	Joint Secretary (Highways)
3.	Shri Raghav Chandra	Chairman and Managing Director, NHAI
4.	Shri A.K. Singh	Member (Projects)
5.	Shri R.K. Pandey	Member (Projects)

At the outset, the Hon'ble Chairperson welcomed the Members and the representatives of Ministry of Road, Transport and Highways (MoRTH) to the Sitting and drew their attention to Direction 55(1) of the "Directions by the Speaker" regarding confidentiality of evidence tendered before the Parliamentary Committees.

2. The representatives of MoRTH then made a power-point presentation on the functioning and performance of National Highways Authority of India (NHAI). In the presentation, the representatives elaborated upon various aspects of the NHAI which inter alia included progress of the National Highways Development Project, major Policy Initiatives taken by NHAI for smoother execution and timely completion of projects, for instance, permission to the BOT concessionaires to quit after two years of construction completion and adopting the Hybrid Annuity model for award of projects. Greening of highways, provision of basic amenities along the highways and adoption of electronic toll collection called FASTag were also explained. After the presentation, the Chairperson and Members of the Committee raised queries on a wide range of issues, particularly poor condition of highways and resultant road fatalities in various parts of the Country, loopholes in the selection of highways to be constructed/revamped and granting of contracts, the 'Bharat Mala' Project, traffic congestion at toll plazas, need to install common duct beneath the Highways during construction for laying of utility cables, response of people to the electronic toll collection system introduced by the Authority, allocation of funds to NHAI by the Government and the Audit observation regarding book keeping in NHAI. The representatives of MoRTH responded to the queries as well as explained the serious impediments faced by NHAI in completing National Highways projects due to litigation and cumbersome land acquisition. In respect of points for which information was not readily available with them, the Chairperson directed that written replies may be furnished to the Committee Secretariat at the earliest.

***	***	***	****	
	(A verbatim record of the pro	ceedings has been kept	ot separately).	

(The representatives of MoRTH then withdrew)

The Committee then adjourned.

#### APPENDIX II

## COMMITTEE ON PUBLIC UNDERTAKINGS (2016-2017)

#### MINUTES OF THE SEVENTH SITTING OF THE COMMITTEE

The Committee sat on Wednesday, the 24<sup>th</sup> August, 2016 from 1100 hrs to 1300 hrs in Committee Room 'G-074', Ground Floor, Parliament Library Building, New Delhi.

#### **PRESENT**

Shri Ramesh Bais - (in the Chair)

#### **MEMBERS**

#### Lok Sabha

- 2. Dr. Kambhampati Haribabu
- 3. Shri Prahlad Patel
- 4. Shri Ajay Nishad
- 5. Shri Ram Sinh Rathwa
- 6. Shri Sushil Kumar Singh
- 7. Shri Rameshwar Teli

#### Rajya Sabha

- 8. Shri Narendra Budania
- 9. Shri Ram Narain Dudi
- 10. Shri Naresh Gujral
- 11. Shri Ram Chandra Prasad Singh

#### **SECRETARIAT**

- 1. Smt. Sudesh Luthra Joint Secretary
- 2. Smt. Anita B. Panda Director
- 3. Shri G.C. Prasad Deputy Secretary

#### **NATIONAL HIGHWAYS AUTHORITY OF INDIA**

- 1. Shri Raghav Chandra Chairman and Managing Director
- Shri Niraj Verma Member (PPP)
   Smt. Veena Ish Member (Admn.)

In the absence of the Hon'ble Chairperson, the Committee chose Shri Ramesh Bais, Member of the Committee, to chair the sitting in terms of rule 258(3) of the Rules of Procedure and Conduct of Business in Lok Sabha. The Hon'ble Chairperson brought to the notice of the representatives of National Highways Authority of India (NHAI) Direction 55(1) of the "Directions by the Speaker" regarding confidentiality of evidence tendered before the Parliamentary Committees.

- 2. The representatives of NHAI then made a power-point presentation on the functioning and performance of National Highways Authority of India (NHAI). In the presentation, the representatives elaborated upon various aspects of the NHAI which inter alia included key achievements of NHAI for instance e-tendering for award and construction of projects, number of projects completed and projects under implementation, source of funds and their utilization on various activities of NHAI, software based accounting system, implementation of electronic toll collection mechanism and public response to it so far, initiatives launched by NHAI and Government of India to establish Advanced Traffic Management system, adopting advanced road engineering and construction technologies, use of waste plastic material from Ghazipur landfill site in Delhi in construction of roads, providing emergency plane-landing facility on select roads, wayside amenities, various innovative policies implemented to boost NH construction e.g. 100% equity divestment, securitisation of BOT projects, one-time fund infusion, rationalised compensation, amendments in Model Concession Agreement based on suggestions of the private sector and lenders etc.
- 2. After the presentation, the Hon'ble Chairperson and Members of the Committee raised queries on a wide range of issues particularly on construction of toll plazas outside the cities, safety and surveillance being put in place in light of the recent rape incident on the NH in Bulandshahar, provision of service lanes near toll plazas, achievement of the 100 kms/day target of NHAI, problems relating to land acquisition, green highways, penalty for non-performing contractors, highway patrolling and policing, book keeping, quality of roads, sub-letting of contracts, provision for more Foot Over Bridges (FOBs) underpasses, service lanes as well as hospitals and first aid centres in highways for accident victims etc. On the specific query regarding the performance so far under the newly adopted 'hybrid-annuity model' to award projects, it was informed that so far 24 projects covering 1280 km of NH have been awarded under the same. About 'FASTag' use, around 45,000 road users were stated to be using it for faster toll payments. The representatives of NHAI further responded

to the queries as well as explained the serious impediments faced by NHAI in completing National Highways projects due to litigation and land acquisition issues. In respect of points for which information was not readily available with them, the Chairperson directed that written replies may be furnished to the Committee Secretariat at the earliest.

(The representatives of NHAI then withdrew)

(A verbatim record of the proceedings has been kept separately).

The Committee then adjourned.

#### **APPENDIX III**

## COMMITTEE ON PUBLIC UNDERTAKINGS (2016-2017)

#### MINUTES OF THE NINTH SITTING OF THE COMMITTEE

The Committee sat on Monday, the 19 September, 2016 from 1100 hrs to 1215 hrs in Committee Room 'A', Ground Floor, Parliament House Annexe, New Delhi.

#### **PRESENT**

Shri Shanta Kumar - Chairperson

#### **MEMBERS**

#### Lok Sabha

- 2. Shri Lal Krishna Advani
- 3. Shri Ramesh Bais
- 4. Dr. Kambhampati Haribabu
- 5. Shri Kristappa Nimmala
- 6. Shri Narendra Keshav Sawaikar
- 7. Shri B. Senguttuvan
- 8. Shri Sushil Kumar Singh
- 9. Shri Kalikesh Narayan Singh Deo
- 10. Shri Rameshwar Teli

#### Rajya Sabha

- 11. Shri Narendra Budania
- 12. Shri Ram Narain Dudi
- 13. Shri Naresh Gujral
- 14. Shri Ram Chandra Prasad Singh

#### **SECRETARIAT**

- 1. Smt. Sudesh Luthra Joint Secretary
- 2. Smt. Anita B. Panda Director
- 3. Shri G.C. Prasad Deputy Secretary

#### Ministry of Road, Transport and Highways

- 1. Shri Sanjay Mitra Secretary
- 2. Smt. Veena ish Member (NHAI)

(Additional Secretary)

3. Shri Niraj Verma - Member (NHAI)

(Additional Secretary)

4. Shri R.K. Pandey - Member (NHAI)

(Additional Secretary)

The Hon'ble Chairperson welcomed the representatives of Ministry of Road Transport and Highways (MoRTH) to the Sitting and drew their attention to Direction 55(1) of "Directions by the Speaker" regarding confidentiality of evidence tendered before the Parliamentary Committees.

- 5. The Secretary, MoRTH then introduced himself and other officials to the Committee. Thereafter representatives from NHAI briefed the Committee on the cost benefit analysis of constructing concrete roads and bituminous roads. The Hon'ble Chairperson, CoPU spoke on the cost effectiveness, long life and other advantages of constructing concrete roads especially in hilly terrains and also raised a query on the existing low percentage of concrete cement roads and highways in the Country as compared to other Countries.
- 6. Thereafter, Members of the Committee raised queries on a wide range of issues, e.g. Bharat Mala Project, NPAs of NHAI, penalisation of erring firms, smart phone application based online complaint forum, the number of cases under arbitration and the amount pending due to litigation, patrolling of highways, measures taken for prevention of accidents on highways, provision for medical aid to accident victims and a dedicated ambulance service on the highways, toll collection, subletting of projects, consumption of fuel in concrete *vis-a-vis* bituminous roads, designing of safer roads etc. The other issues enquired by the Committee were whether a holistic study of demand and supply was being done before financing road projects, finalisation of consultants for preparation of DPRs, source of funds, status of various projects which are under implementation & punitive action taken on defaulters etc. The representatives of MoRTH and members of NHAI responded to some of the queries. In respect of points for which information was not readily available, the Chairperson directed that written replies may be furnished within fifteen days.

(The witnesses then withdrew).

A verbatim record of the proceedings has been kept.

The Committee then adjourned.

#### **APPENDIX IV**

# COMMITTEE ON PUBLIC UNDERTAKINGS (2017-2018)

#### MINUTES OF THE FIFTH SITTING OF THE COMMITTEE

The Committee sat on Thursday, the 27<sup>th</sup> July 2017 from 1500 hrs to 1515 hrs in Committee Room 'E', Basement, Parliament House Annexe, New Delhi.

#### **PRESENT**

Shri Shanta Kumar - Chairperson

#### **MEMBERS**

#### Lok Sabha

- 2. Shri Ramesh Bais
- 3. Shri G. Hari
- 4. Shri Rabindra Kumar Jena
- 5. Shri Ajay Nishad
- 6. Shri B. Vinod Kumar
- 7. Shri Prahlad Singh Patel
- 8. Shri Ravneet Singh
- 9. Shri Sushil Kumar Singh
- 10. Shri Rameswar Teli

#### Rajya Sabha

- 11. Shri Shamsher Singh Manhas
- 12. Shri Praful Patel
- 13. Shri Tapan Kumar Sen

#### **SECRETARIAT**

1.	Shri G.C. Prasad	Deputy Secretary
2.	Smt. Mriganka Achal	<b>Under Secretary</b>

- 2. At the outset, the Chairperson welcomed the members to the sitting of the Committee and briefed about the agenda of the sitting regarding consideration and adoption the draft report on 'National Highways Authority of India (NHAI)'.
- 3. The Committee then took up for consideration of the draft report. The Committee adopted the draft report without any changes/modifications. The Committee then authorized the Chairperson to finalise the aforesaid draft Report on the basis of factual verification by Ministries/ Departments concerned and present the same to Parliament.

The Committee then adjourned.

#### **National Highways Authority of India**

#### Statement of Source & Application of Funds for the Month of March'2017 (Prov.)

(Rs. In crore)

				(RS. In crore			
		20	2015-16		2016-17		
	Particulars	Actual for 2015-16	Actual up to March	Budget Estimated	Actual up to March	Actual for March (Prov.)	
Α	Opening Cash & Bank Balance	2672.35	2672.35	1137.89	6740.80	5495.64	
В	Receipts						
(i)	From Budgetry Support						
	Cess	15420.00	15420.00	24107.35	2326.50	0.00	
	Plough Back	6537.73	6537.73	7475.00	7500.00	0.00	
(ii)	From Additional Budgetery Support						
	Fund for NH(O)	370.27	370.27	1140.05	5409.02	1509.02	
(iii)	Fund Through IEBR						
	Capital Gain Tax Exemption Bonds u/s 54 EC of Income Tax Act(Including application Money)	4281.17	4281.17	35000.00	5518.92	855.50	
	External Assistance for EAPs/World Bank Loan			634.00			
	Tax Free Infra Bonds (10 Years & 15 Years Tenure)	19000.00	19000.00	0.00	0.00	0.00	
	Taxable Bonds (25 Years Tenure) 2016-17	0.00	0.00	0.00	10000.00	0.00	
	Taxable Bonds (5 Years Tenure) 2016-17	0.00	0.00	0.00	9045.00	4025.00	
	Taxable Bonds (30 Years Tenure) 2016-17	0.00	0.00	0.00	8500.00	0.00	
(iv)	Others						
	Eastern Peripheral Expressway	0.00	0.00	1326.00	0.00	0.00	
	Fund of Maintenance	99.99	99.99	1128.48	100.00	0.00	
	Capital Receipts (BG Encashment, LD, Penality, etc)	118.92	118.92	0.00	134.38	43.02	
	Interest Receipts on Unutilised Capital	967.59	967.59	700.00	1141.19	190.52	
	Green Highways/Safety Fund			500.00			
	Total Receipts (i+ii+iii+iv)	46795.67	46795.67	72010.88	49675.01	6623.06	
X	Total Available Fund (A+B)	49468.02	49468.02	73148.77	56415.81	12118.70	
Α	Project Expenditure (CWIP)						
(i)	CWIP- Land Acquisition	21933.85	21933.85	22840.73	17598.44	274.72	
(ii)	CWIP- Utility Shifting	867.18	867.18	4606.66	1446.86	267.93	
(iii)	CWIP- Others & Pre-Construction Exps.	841.27	841.27	0.00	885.67	170.33	
(iv)	CWIP- Civil Work	5538.70	5538.70	27160.22	11164.20	3530.94	
(v)	IE/Supervision Consultants Payment	296.03	296.03	0.00	373.59	122.31	
(vi)	Grant(VGF) Paid	1411.20	1411.20	3522.10	2204.17	703.62	
(vii)	Annuity Payment	3618.79	3618.79	6210.89	3560.73	941.57	

	Total Expenditure (CWIP)	34507.02	34507.02	64340.60	37233.66	6011.40
В	Increase in Advances to Contractors, Consultants and Deposit works to Govt. Deptts	3866.64	3866.64	0.00	8272.89	1707.39
С	Maintenance Expenditure	1326.52	1326.52	1128.48	888.47	88.54
D	Investment in Subsidiaries (SPVs)	0.28	0.28	0.00	96.17	4.97
E		107.29	107.29	0.00	44.78	0.00
	Fund released to SPVs against Plaugh Back of Toll	107.29	107.29	0.00	44.78	0.00
F	Repayment of Loans & Borrowings					
(i)	ADB Loan	41.90	41.90	59.00	48.19	0.00
(ii)	Exchange Rate Fluctuation in ADB Loan	(40.31)	(40.31)	0.00	0.00	0.00
(iii)	Redumption of 54 EC Bonds	2902.07	2902.07	0.00	2942.13	561.95
(iv)	GOI Loan	0.00	0.00	0.00	0.00	0.00
G	Intrest and other expenditure on bond issue	2227.70	2227.70	5016.68	3252.27	2217.81
Н	Administration Expenditure (Net of Receipts)	228.90	228.90	319.34	247.82	39.71
ı	Difference between Current Liabilities & Provisions & Interunit	(2445.78)	(2445.78)	0.00	(1097.17)	(2991.33)
J	Expenditure on WB (TA)	6.21	6.21	0.00	6.37	3.72
K	Purchase of Fixed Assets (Net of depreciation reserve & disposal)	(1.22)	(1.22)	33.22	5.55	(0.13)
L	Fund Infusion - BOT Projects			500.00		
М	Green Highways/Safety Fund			500.00		
N	Total Expenditure (A to M)	42727.23	42727.23	71897.32	51941.14	7644.03
	Closing Cash & Bank Balance (X-N)	6740.80	6740.80	1251.45	4474.67	4474.67
	TOTAL	49468.02	49468.02	73148.77	56415.81	12118.70
	Summary of	Expenditure				
	Total Public Sector Expenditure	42727.23	42727.23	71897.32	51941.14	7644.03
	Total Private Sector Expenditure	27367.96	27387.66	25892.01	14902.53	827.43
	Grand Total	70095.19	70114.89	97789.33	66843.67	8471.46