

GOVERNMENT OF TAMIL NADU

Highways and Minor Ports Department

INTRODUCTION

Tamil Nadu has a unique distinction of having established Highways Department in 1946 to exclusively look after road development works. At present, Tamil Nadu State Highways Department maintains 62,468 Km of road net work spread across the State and is in the process of adding another 7,834 Km with a vision to "***increase the capacity, connectivity, efficiency and safety***". As envisioned by the **Hon'ble Puratchi Thalaivi Amma**, the State is advancing towards fulfilment of strategic plan for infrastructure development as envisaged in **Vision Tamil Nadu 2023**. Vision 2023 aims at comprehensive improvement of road networks within the State at a outlay of Rs.1,34,600 Crore.

Tamil Nadu has a coastline of 1076 Kms. The Tamil Nadu Maritime Board was formed in 1997 to administer Non-major ports. At present, 24 non-major ports for cargo handling, Pamban channel pilotage and passenger ferry operations are under the control of Board. The Tamil Nadu Maritime Board is committed to decongest major ports and to provide a gateway to new entrepreneurs for handling cargo for small, medium and large scale industries located in the hinterland of Tamil Nadu.

To realise the vision of Highways Department in providing safe, resilient connectivity, Government spends around Rs.8000 Crore per annum towards maintenance and improvement of SH, MDR and ODR. The National Highways Wing of the State carries out routine maintenance and development of 1985 Km of National Highways entrusted to it. During current year (2017-18), this State is implementing Plan works to the tune of Rs.620 Cr. from the funds of MoRT&H and has proposed additional list of works for a cost of Rs.919 Cr.

National Highways Authority of India (NHAI) has been entrusted with 3,496 Km for development in the State and so far has finished development of 2,176 Km length with active cooperation of the State Government. NHAI has established 45 Toll Plazas within the State contributing considerable revenue to the Union exchequer by way of user fee collections. NHAI is in the process of further development of the remaining 1320 Km of National Highways in the State handed over to them. The efforts taken by Ministry of Road Transport and Highways and NHAI in improving the National Highways in the State is appreciable. The State Government is closely monitoring the Land Acquisition issues relating to NHAI/ NH works and has given instructions to the field staff to expedite the same.

Short notes on various issues pertaining to the National Highways/ NHAI controlled road network in Tamil Nadu which requires immediate attention is detailed in following pages in this Memorandum.

1. URGENT IMPROVEMENTS OF NATIONAL HIGHWAYS LEADING TO CHENNAI CITY:

The following National Highways are connecting Chennai from West - NH 4 (Bangalore), North West - NH 205 (Tirupati) and North – NH 5 (Vijayawada).

a. TAMBARAM CHENGALPATTU SECTION OF NH 45

Grand Southern Trunk Road (NH-45) originating from Chennai and leading up to Dindigul is a significant National Highway connecting the State Capital with the southern and western parts of the State. This highway was developed by NHA in different sections, out of which development of Tambaram - Tindivanam Project Highway as a 4-lane road was undertaken by M/s. G.M.R. Toll Way Ltd. under the BOT (Annuity) mode. The toll collection in the section began during 2005 and the concession will end in November, 2019. The stretch between Tambaram and Chengalpattu carries more than 1,00,000 PCUs per day, which may be one of the highest in the Country. As a routine, people have to wait for more than 2 hours to cross this stretch at peak hours and situation gets worse during holiday and festival seasons as this is the prime connectivity to south of Tamil Nadu.

Considering the top priority, a suggestion for upgradation of Perungalathur (Irumbuliyur) to Vandalur section of NH-45 was sent by Hon'ble Chief Minister of Tamil Nadu vide D.O. letter dated 20.10.2017. The State Government would like to suggest the following urgent remedies to debottleneck the traffic issues in this stretch.

i. Immediate Measures:

a) Based on subsequent detailed discussions with the Ministry, a proposal for **8 laning of 2.30 km stretch from Irumbuliyur to Vandalur (ROB) at a cost of Rs.22.41 Cr** has been sent to NHAI HQ for sanction of funds to take up the work by the State NH wing.

b) State Government also proposes that the stretch from Vandalur to **Guduvancheri (5 km) for upgradation to 8-lane at a cost of Rs.50 Cr as Phase II.**

c) The further stretch from **Guduvanchery to Chengalpattu can be taken up for 6 laning** in Phase III.

ii. Permanent Measure:

Keeping in view the ever increasing traffic (current traffic density itself is more than 1,00,000 PCUs in some stretches) and the expansion of Chennai City limits, the State Government has

announced the construction of a Elevated Highway from Chennai Airport to Chengalpattu. DPR for the same has been completed by the Chennai Metropolitan Development Authority. During recent meetings with NHAI, it has been suggested by NHAI that they would take up the elevated corridor work. **Elevated highway from Tambaram to Chengalpattu will be an appropriate solution to meet the present traffic scenario and we request that NHAI may expedite project implementation.**

b. KOYAMBEDU TO POONAMALLEE STRETCH OF NH-4:

The existing road is situated within the limits of Greater Chennai Corporation and are not maintained properly by NHAI which is leading to public criticism and local agitations.

National Highways Authority of India has to carry out the maintenance by themselves or to remit an amount of Rs.21 Crore to the State Government for the maintenance of the stretch from Koyembedu to Maduravoyal.

Immediate Measures:

a. **It is learnt that NHAI is processing the tenders for improvements of the Koyembedu to Maduravoyal Section. NHAI may expedite the work and restore the stretch immediately to avoid further public criticism.**

b. NHAI also has to **repair the main carriageway in Senneerkuppam and Saveetha Dental College area** damaged during the recent rains. NHAI has to **provide lighting facilities from Koyambedu to Poonamallee** to prevent accidents and improve the safety.

c. NHAI has to immediately take up the **restoration of main carriageway and service roads and desilting of drains and Cross Drainage Structures to avoid inundation.**

Permanent Measure:

NHAI has indicated that an **elevated corridor can be constructed from Maduravoyal upto Poonamallee.** NHAI may expedite the same keeping in view the increased traffic demands.

c. POONAMALLEE - WALAJAPET SECTION OF NH 4(93 KM)

This road was 4 laned by NHAI in 2007 and 6 laning work was commenced in 2013 which was to have been completed by November 2015. However, the work was not taken up by the concessionaire due to a dispute between the NHAI and concessionaire and the agreement was terminated on 29.07.2016. The existing toll road is in very bad condition causing public criticism, agitations and litigations.

It is learnt that NHAI is processing tenders for **6 laning and Improvement of Sriperumbudur to Walajapet section** of

project highway under the Hybrid Annuity mode. The **tender process may be expedited for the stretch and entrusted early** to alleviate the road conditions.

As an immediate measure, the Poonamallee to Sriperumbudur section of NH4 may be handed over to the State National Highways wing for maintenance. An amount of Rs.60 Crores may be sanctioned to State NH wing for taking up the improvement works in the above stretch.

Permanent Measure:

NHAI may study the options for providing Elevated Corridor from Poonamallee to Sriperumbudur section of NH4 keeping in view the land constraints and traffic demands.

d. CHENNAI – TIRUPATI SECTION OF NH 205 (58 KM)

The stretch from Thirunindravur to Tirupathi was taken up for widening to 2 lane with paved shoulder and 4 lane by NHAI. The work was commenced in April 2011 and scheduled for completion in October 2013. Work on 24 km has not been taken up by the concessionaire including Tiruvallur Bypass.

NHAI has to take necessary action to complete the balance stretch of 24 km at the earliest. Further, NHAI has to desilt the existing drains, clear the vegetation on the

upstream and downstream sides of existing culverts/ bridges in this stretch periodically.

NHAI has proposed bypass/ realignment at 10 locations from km 43/850 to 59/600 of NH 205 and handed over the abandoned portions to State Highways for further maintenance. The abandoned portions of the NH 205 handed over to State Government have been improved under State funded Schemes. No maintenance works have been taken up in the above overlap portions by NHAI which has put the road condition in very bad shape. This has defeated the objective of providing continuous riding comfort and has drawn adverse criticism from public. **The 2.53 km of existing road at Thirupachur, Kakkalur, Thaneerkuppam, Thozur and Veppampattu (overlap portions of the approved realignment/ bypass), which is still with NHAI has to be maintained by NHAI.**

Immediate Measure:

State Government had taken up improvement works in the past from Padi – Tirunindravur Stretch of NH 205 to avoid public criticism at a cost of Rs.5 Cr. Later the stretch was handed over to State Government.

NHAI may take up restoration of the left over stretches falling in realignment/ bypass immediately or the State Government may be allowed to take up the restoration works.

GoI may sanction an amount of Rs. 3 Crore to the State Highways wing to take up the improvement.

Permanent Measure:

NHAI has to complete the Bypass and realignment works immediately and maintain the stretch in traffic worthy condition.

e. CHENNAI – TADA SECTION OF NH 5 (43 KM)

NHAI has completed 4 laning in 2006 and taken up the 6 laning work in April 2009 which was to be completed in October 2011. The concessionaire completed the works on 23 km and had not taken up the remaining work. Dispute arose between the NHAI and concessionaire, and the agreement was terminated on 23.06.2016

The existing toll road is in very bad condition causing public criticism, agitation and litigations. The following are the issues required to be attended to immediately.

- NHAI has to **restore the stretches damaged** during the recent rains.
- The **service road near Gummidipoondi and Bethikuppam needs to be expedited.**
- NHAI has to attend **the cracks developed in the newly constructed bridge** at SIPCOT near Gummidipoondi

- NHAI has to provide **lighting facilities to prevent accidents** in municipal/ urban locations
- NHAI has to **desilt the existing drains, clear the vegetation on upstream and downstream sides of existing culverts in this stretch periodically.**
- NHAI has to construct **drains in disconnected portions for the continuity in the existing storm water drains near Madhavaram Roundtana area on GNT road to avoid stagnation of water** as a monsoon preparedness activity. Also, as a immediate measure, NHAI may **deploy suitable pumping arrangements during rains** to clear the stagnant water in that area.
- NHAI has to carry out the maintenance work immediately and to engage a fresh contractor to carry out the 6-laning work at the earliest.

f. CHENNAI BYPASS:

The existing toll road is in bad shape causing public criticism, law and order problem which is leading to court case bringing bad name to the Government.

NHAI has recently renewed the riding surface. However, NHAI has to provide adequate lighting facilities to prevent accidents.

During the recent rains, the stretches near Porur affected by means of stagnated water due to poor drainage

system. NHAI may take up the desilting of drains, provision of adequate drainage/cross drainage structures in coordination with district administration to avoid inundation in this area and to mitigate future flood problems.

2. IMPROVEMENT OF NATIONAL HIGHWAYS IN OTHER PARTS OF TAMIL NADU:

a. TINDIVANAM – KRISHNAGIRI SECTION OF NH 66 (183 KM)

The work was taken up for widening to 2 lane with paved shoulder by NHAI. The work was commenced in April 2012 and suppose to be completed in April 2014. The Concessionaire completed the works on a 119 km stretch and the works on the remaining 63 km are to be completed. **The Concessionaire is not maintaining the existing road for more than 6 years after completion of 119 km** and the progress of work in the remaining stretch is also very slow. **NHAI has to take necessary action to complete the works in remaining stretch at the earliest**

NHAI has proposed to handover the abandoned stretches of 6 bypasses of Tindivanam, Gingee, Singarampettai, Uttangarai, Samalpatti and Mathur in Tindivanam Krishnagiri Section of NH 66 pending finalisation of issues with existing concessionaire and entrusting the balance works to new concessionaire.

These stretches passes through heavily built up area. Since the stretches proposed to be handed over are heavily damaged with lots of potholes and patches, immediate restoration is required.

Abandoned NH stretches on the 6 bypasses to a length of 22 km may be declared as SH and handed over to State Highways along with the sanction of Rs.26.15 Crore to the Government of Tamil Nadu to renew the above stretches to the required standards.

**b. DINDIGUL – KUMULI SECTION OF NH 45 E AND NH 220
(134 KM):**

The work for widening to 2 lane with paved shoulder was taken up by NHAI. The work was commenced in September 2011 and was to be completed in August 2013. The Concessionaire completed the works on a 91 km stretch and the **works on the remaining 43 km has to be completed.**

The progress of work is very poor. NHAI has to take necessary action to complete the works in remaining stretch at the earliest

c. SERVICE ROAD FROM THUVAKUDI TO PALPANNAI ON THANJAVUR TO TRICHY SECTION OF NH 67:

National Highways Authority of India while widening the road to 4 lanes had not provided continuous service road which led to several accidents. In order to avoid road accidents, the State Government agreed to bear the cost of land acquisition and National Highways Authority of India agreed to provide a service road. An amount of Rs. 84.50 Cr. was deposited by the State Government in 2014.

National Highways Authority of India estimated an amount of Rs. 196 Cr. towards the Land Acquisition cost if 60 m ROW is to be adopted. With 60 m ROW, National Highways Authority of India is to bear 50% of cost of land acquisition.

Immediate Measure:

NHAI may revise the LA notification by restricting the ROW to 45 m considering local constraints and proceed with the construction of service road.

Permanent Measure:

It is suggested to explore the possibility of elevating the project highway at the specified stretch so as to accommodate the service road from Thuvakudi to Palpannai beneath the elevated portion and thus, the long pending demand of the local public can be fulfilled with minimal

acquisition of land, which will ultimately reduce the huge requirement of funds for LA.

National Highways Authority of India needs to take appropriate action as suggested.

**d. DINDIGUL – ODDANCHATRAM – PALANI – POLLACHI
COIMBARTORE – ANNUR – SATHIYAMANGALAM -
THIMBAM-BANGALORE ROAD (NH 209)**

Dindigul – Oddanchatram – Palani – Pollachi –Coimbatore – Annur – Sathyamangalam – Thimbam - Bangalore section of **NH-209 has been included in NHDP-IV** and the development as a Project Highway was entrusted to NHAI. Consultant for undertaking **Feasibility Study (FS) was engaged as long back as 2009 by NHAI** and the study is yet to be concluded.

Meanwhile, based on the DPR prepared by the State, the four laning of the section between Pollachi and Coimbatore was entrusted to NHAI, However, the progress of the work is very slow. As such, the work needs to be expedited since the public are vociferous in their demands. The **Feasibility Study and DPR study have to be completed immediately and the implementation of 4/6-laning should be taken up at the earliest.**

3. ADDITIONAL ALLOCATION FOR STATE NH PROJECTS

(a) ADDITIONAL PROPOSAL UNDER ANNUAL PLAN:

Subsequent upon declaration of “**Dindigul - Natham - Kottampatty Road**” as new National Highway (**NH-383**) and based on the discussions with the Ministry, the development of the stretch as 2-lane with paved shoulders has been included in the Additional Proposal of Annual Plan 2017-18 at a cost of **Rs.340 Crore**. Accordingly, **Additional Proposal of Rs.919.32 Crore under Annual Plan 2017-18** has been sent for sanction.

(b) ANNUAL PLAN FOR BRIDGES

Proposal under **Annual Plan (Bridges)** has been sent for sanction of funds for **Rs. 69.40 Cr.**

(c) PERIODIC RENEWAL

Proposal under **Periodic Renewal** has been sent for sanction of funds for **Rs.61.85 Cr.**

(d) INTER STATE CONNECTIVITY / ECONOMIC IMPORTANCE

Proposal for sanction of works (**18 Works-392.97 km-Rs.707.19 Crore**) under ISC/Economic Importance scheme 2017-18 as per the Central Road Fund Rules, 2014 has been sent vide Govt. letter dated 25.09.2017 and a reminder sent subsequently vide Govt. letter dated 13.11.2017.

(e) ADDITIONAL PROPOSAL UNDER RCRF 2017-18:

MoRT&H has sanctioned Rs.355.91 Cr under **Revamped Central Road Fund Scheme** for improving 372.97 Km of roads (50 works) in the State during 2017-18. In furtherance to this, a few more State Roads are identified for taking up improvements at a tentative financial cost of **Rs.750 Cr. as Additional List under RCRF 2017-18.**

4. UP GRADATION OF STATE HIGHWAYS INTO NATIONAL HIGHWAYS:

a) Roads Announced for upgradation as NH during inauguration of Suchindram Bridge on 13.01.2017:

It has been announced during the inauguration of Suchindram Bridge on 13.01.2017 that 234 km of State Highways will be declared as National Highways. Among which, 2 roads for a total length of 104.20 Km have already been approved in principle as new NH. However, the remaining 3 roads are yet to be approved by MoRT&H as under;

- (i) Ooty – Kothagiri – Mettupalayam Road SH 15 (42.4 km)**
- (ii) Abdullapuram – Thirupattur Road SH 122 (79.50 km)**
- (iii) Vellore – Ussoor Road SH 207 (8 km)**

b) Additional roads proposed for upgradation as NH

In addition, the State Govt.'s request for declaration of following 3 state roads as new NHs for a total length of 282.70 Km is yet to be considered by MoRT&H;

- (i) Malur - Hosur - Adhiyamankottai road (91.70 Km)**
- (ii) Thanjavur - Mannargudi - Thiruthuraipoondi - Vedaranyam -Kodiyakarai road SH-63 (113 Km)**
- (iii) Erode – Dharapuram Road SH-83 A (78 km)**

5. ENTRUSTMENT OF NEWLY DECLARED NATIONAL HIGHWAYS TO THE STATE:

Recently, MORT&H vide Gazette Notifications dated 06.06.2017 declared 3 (three) new NHs in the State, Viz: Thanjavur - Perambalur - Athoor section of NH-136, Salem - Harur - Vaniyambadi section of NH-179A and Thoppur - Mettur - Bhavani section of NH-544H and entrusted the development activities to NHAI. Since NHAI has a big shelf of projects in the State for study and their implementation, these **new NHs should be entrusted to the State Government for maintenance and development** duly considering the willingness of the State to undertake implementation of the projects with a suitable reduction in centage/ agency charges as already conveyed by me vide D.O. Letter dated 27.10.2017.

In the mean while, considering the present deteriorated condition of certain stretches of newly declared NHs, immediate restoration is warranted.

Immediate Measure:

In Salem – Tirupattur - Vaniyambadi Road, around 56 km is heavily damaged and requires immediate renewal to make it motorable for which **an allocation of Rs.22 Cr may be sanctioned to the State Government in addition to the**

routine maintenance allocation of Rs. 10 Crore for all the newly declared 3 NHs.

Permanent Measure:

DPR for the above three roads have already been communicated to MoRTH. Sanction may be accorded in the first instance for Land Acquisition for 4 laning these stretches and works may be taken up through State NH wing on completion of land acquisition.

6. IMPROVEMENT OF BLACK SPOTS IN NATIONAL HIGHWAYS:

In Tamil Nadu, in 2016, **17,218 people were killed in road accidents** (Road Accidents in India 2016 published by MoRTH). As per calculations, Tamil Nadu loses nearly Rs.61 Cr every day due to road fatalities alone. If grievous injuries are added the loss is around Rs.131 Cr per day (3.5 % of State's GDP). As the vulnerable age group is the working age group, road accident trauma pushes many families into poverty. From the statistics, **8% of roads in the State (NH and SH) share more than 71% of road traffic accident deaths.**

Considering the severity of the issue, the State Government has taken up several measures. This includes, State Road Council headed by Transport Minister, District Road Safety Councils to strengthen the institutional arrangements, Road Safety Policy in 2007 aiming at reversing the rate of road accidents. The Accident Data Management System is also a key initiative which helps in strategic planning of road safety interventions. Besides, **the State Government has approved a special road safety programme costing Rs.1130 Crore** for carrying out the remedial measures through engineering interventions. In the last three years, around 4756 vulnerable sections on State Highways, Major District Roads and Other

District Roads have been **taken up at a cost of Rs.1060 Crore and around 3300 vulnerable spots have been rectified.** The vulnerable locations include 107 black spots where fatal accidents are more than 5 per year and 20 black spots where fatal accidents are more than 3 per year.

It is learnt that proposal sent from Regional Office, NHAI, Chennai for **Rs.2391 Crore towards permanent measures for rectification of 61 black spots on NHAI roads** have been returned with remarks from Head Quarters. **Keeping in view of the socio-economic loss caused by road accidents, the road safety proposal requires to be reconsidered and expedited. Improved allocation for enhanced road safety in NHAI owned roads in Tamil Nadu will be appreciated.**

State Government has taken up several measures to enhance the road safety. Under the World Bank funded Tamil Nadu Road Sector Project, Government is taking up a demonstration project comprising of efforts from all the linked sectors in Kancheepuram District and East Coast Road to provide a comprehensive solution.

It is well known that the major cause of accidents is human factor. Amongst the human factors, fatigue is the predominant factor which is linked with socio-economics of the user.

Government needs to provide a forgiving road environment to adapt to human limitations.

Government of Tamil Nadu is in the process of introducing newer technologies including **Intelligent Transport System in Chennai for effective Traffic Management** with loan assistance from JICA.

As stated earlier, NH and SH share the major portion of road accident deaths in the State. NHAI can deploy additional ambulances in the vulnerable stretches NHAI Project Roads. Additional Chief Secretary, Highways and Minor Ports Department had written to the Chairman, NHAI in this regard vide DO Letter dated 04.07.2017 and also mentioned this while meeting the Chairman, NHAI and Secretary, RTH in person.

At this point of time the Government of Tamil Nadu would like to put forth following proposals under road safety component.

a. Short Term Measures



It is learnt that the proposal of NHAI for 61 block spots locations for Rs. 2391 Crore indicated above is for the construction of grade separators at major road junctions.

However, the **NHAI may take up the lighting provisions at minor road junctions, built up sections of project highways, rumble strips and similar measures along NHs.**

- **NHAI may introduce audio tactile strips at the edges of carriageway to warn the road users of lane jumping.**
- Speed Management is another major issue, the Government needs to take adequate steps. **NHAI may install speed monitoring systems along NHAI and warn the users for over speeding.**
- NHAI may **deploy additional ambulances** through the concessionaires in vulnerable NHAI stretches and **attach the ambulances operated by the NHAI concessionaires with State run EMRI service (108 service) for effective delivery of service.**
- MoRTH may **fund the establishment of full-fledged trauma care centre along NHs** initially at Sriperumbudur and Chengalpattu. An **amount of Rs. 40 crore may be sanctioned for this purpose.** This would drastically reduce the mortality rate.

The following are some of the additional road safety works in National Highways that the Government of Tamil Nadu request for immediate intervention of MoRTH.

**b. Grade Separator/ Vehicular Underpass in NH 45
(Tindivanam – Ulundurpet Section)**

While taking up 4 laning work of Tindivanam – Ulundurpet Section of NH 45, VUP/ Flyovers were not proposed at all junctions/ intersections. Several fatal accidents occurred in these two junctions after the construction of 4 lanes at **Kootteripattu Junction** and **Arcot – Villupuram Road Junction in Villupuram Bypass of NH 45**. Ministry declared these spots as “**black spots**”. NHAI has assured to construct a flyover at these junctions which needs to be expedited. Immediate action has to be taken by NHAI for the construction.

c. Improvement of Black spots in National Highways:

MoRT&H has identified 77 black spots in the NHAI Project Highways within the State. **NHAI has to take immediate action for rectification of the 77 black spots** so as to save the loss of life due to the accidents. State National Highways wing identified 58 black spots in the National Highways under their control and requested Rs. 110.54 crores from Government of India for rectification. **Ministry has to sanction an amount of Rs.110.54 Crore to rectify the 58 black spots immediately. A long list of works under road safety is being prepared and would be sent to Ministry.**

7. FORMATION OF SALEM WESTERN RING ROAD:

The formation of a standalone bypass to Salem City is included in NHDP Phase-VII. The request of the State for changing the phase of implementation to Phase IV was not accepted by the Ministry. However, considering the necessity to decongest certain stretches of NH 7 & NH 47, I recently made an announcement for forming Salem Western Ring Road. The length of the proposed formation from the junction of NH-7 at Km 196/5 (Arabic College), intersecting with NH-47 at Km 7/6 and joining at Km 215/2 (Attaiyampatty) of NH-7 will be 21 km including construction of 5 (five) numbers of ROBs and the cost implication will be around Rs.610 Cr. **Formation of a Western Ring Road for Salem City of 21 km length, as a first phase of development can be taken up on a priority basis, which may be entrusted to State Government for implementation.**

8. INTEGRATED MODERN BUS TERMINAL FACILITIES IN TAMIL NADU

Apart from Greater Chennai Corporation, which is the biggest urban agglomeration, the State of Tamil Nadu contains 9 (nine) of Municipal Corporations Viz: Coimbatore, Erode, Madurai, Salem, Thoothukudi, Tiruchirappalli, Tirunelveli, Tirupur and Vellore. Greater Chennai has been provided with improved and integrated transport and bus terminus facilities. Whereas, the fast growing cities of Coimbatore, Salem and Madurai which are strategically more important in view of commercial development are still lacking such integrated terminus facilities. **Sufficient land is readily available for taking up such modern bus terminal facilities at Coimbatore and Salem immediately and land is being identified at Madurai also.**

For Coimbatore Bus Terminal, 60 acres of land is available near Vellalur on the Podanur – Chettipalayam Road about 2 km from the Coimbatore Bypass of NH 544 (Salem – Cochin Section).

In case of Salem Bus Terminal, 70 acres of land is available near Arabic College which is located on NH 44 (Bangalore – Salem Section).

The proposed Bus Terminal locations at Coimbatore and Salem are near NH, and sufficient land for further extension

is also available. The State is prepared to locate the requisite land extent at Madurai and expedite the pre-construction activities in the three identified cities. Therefore, it is suggested that MoRT&H may **consider establishing integrated modern bus terminus facilities at Coimbatore, Salem and Madurai cities as a sub-component under “National Corridors Efficiency Programme Component” of the Bharatmala Pariyojana.**

9. BHARATMALA PARIYOJANA PROGRAM:

"Bharatmala Pariyojana", an umbrella programme announced on 25.10.2017, is a welcome project for the highways sector with a focus on optimising efficiency of road traffic movement by bridging critical infrastructure gaps. The program envisages improving efficiency of the National Corridors (G-Q and NS-EW) by decongesting choke points thorough lane expansion, construction of ring roads, bypasses/elevated corridors and logistics parks at identified points. Certain suggestions based on the need and importance of a few corridors in the State have been proposed by the State Government on 08.11.2017 for necessary inclusion/substitution in the shelf of projects identified by the Ministry and entrustment of the suggested stretches to the State NH wing for implementation.

(i) The identified Economic Corridor No:19, **Chennai-Madurai Highway**, which provides the main connectivity to the southern part of Tamil Nadu State, has the highest PCU value of 43,617 among all the 44 economic corridors selected under the program but is presently functioning only with a 4-lane divided carriage way configuration. **As already indicated, the upgradation of the stretch from Perungalathur (Irumbuliyur) to Vandalur (ROB) for 2.30 Km length has been proposed by the State**

Government and sanction of Rs.22.41 Cr. is sought from NHAI to take up the work by the State, as an immediate measure to decongest the highway. Further stretches upto Guduvancheri for about 5 Km length also needs to be taken up for similar upgradation to 8-lane standards about Rs.50 Cr. as a immediate measure to fulfil the demand of public. However, an elevated highway from Tambaram to Chengalpattu will be an appropriate solution to meet the present traffic scenario. Duly considering these suggestions, the **EC:19** may be considered for upgradation to 8-lane standards **from Chennai to Chengalpattu and 6 lane standards upto Madurai** in view of higher traffic intensity and strategic importance of the road.

(ii) Salem is an important city in the State. A major part of the mineral wealth of the State is found in Salem district, including Magnesite, Bauxite, Limestone, Iron-ore, Quartz and Granites. Salem Handloom Industry is well established industry. Important Corridors like North-South Corridor, Salem-Cochin National Highway and many State Highways pass through Salem City. All these are causing the City to play a vital role in State's Economy. Keeping in view of the increased traffic scenario with multiple choke-points and their vulnerability to accidents, 34

Bangalore - Hosur - Dharmapuri - Salem - Namakkal - Karur - Dindigul - Madurai section of NH-7 (new No.44) may be considered for **inclusion in the priority list prepared by MoRT&H** to upgrade from 4-lane to 6/8 lane configuration.

(iii) The stretch of **Salem - Kumarapalayam - Bhavani - Perundurai - Chengapalli of NH-47** (new No.544) can be **considered for up gradation from 4-lane to 6-lane** configuration to have a uniform connectivity as the section beyond Chengapalli up to Coimbatore has already been developed as a 6-lane highway. Further section beyond Coimbatore and up to Cochin may also be considered for up gradation to 6-lane standards to make the entire corridor from **Salem to Cochin as a 6-lane interstate highway.**

(iv) "**Sankakiri - Erode - Perundurai - Chennimalai - Kangeyam**" highway (72 Km) and "**Tiruchengode - Attayampatti - Ariyanallur**" road (46 Km) can be taken up for upgradation duly considering the importance of this corridor under the Inter-Corridor component.

(v) Chennai - Puduchery Section of ECR (137 Km) has been included under Feeder Roads component. Since Chennai - Mahabalipuram stretch has already been improved as 4-lane

highway up to 55 Km and the stretch is under O&M period of the Concessionaire, the remaining stretch from **Mahabalipuram to Puduchery** for 82 Km length could be considered and these improvements can be entrusted to same Concessionaire i.e., **Tamil Nadu Road Development Company** (TNRDC), a Government of Tamil Nadu enterprise. After conclusion of the concession period, the road can be taken back under NH fold.

(vi) **Madurai - Natham** highway having a length of 38 Km should be developed as 2-lane with paved shoulders standards, as it connects two NHs and the work can be entrusted to the State Government as per extant policy of the Ministry.

(vii) This Government has prepared a shelf of projects for forming 32 (thirty two) new bypasses throughout the State and land acquisition has already been initiated with necessary allocation of funds. The land acquisition is in advance stage for the following **4 (four) bypasses**;

S. No.	Town	Intervention	Tentative Length (Km)
1	Bhavani	Bypass	8.184
2	Sivagangai	Bypass	10.600
3	Mannachanallur	Bypass	2.620
4	Parthibanur	Bypass	3.550

It has been stated in the guidelines of the Bharatmala Pariyojana that apart from the shelf of projects identified under the program, any new project proposed by the State will be taken up for consideration by the Ministry, if the State is ready to bear at least 50% of the cost of land acquisition. The State Government suggests that the above 4 (four) bypasses can be taken up for consideration in the first year itself duly considering the willing of the State to bear 50% cost of land acquisition, for its development on a fast track basis under the "**Grand Challenge Mechanism**" and the work may be entrusted to the State Government agencies.

(viii) **Salem City** is a major commercial hub and it can also be considered for a **Logistic Park facility**.

Since Bharatmala Pariyojana is a 5 year plan, the projects suggested by the Government of Tamil Nadu above may be assigned top priority and taken up in the first year itself.

10. ENTRUSTMENT OF PROJECTS OF HIGHER VALUES:

The National Highways Wing of this State has a strong technical core headed by a Chief Engineer, comprising of 4 Circles, 8 Divisions with adequate technical and other personnel, is implementing works to the tune of Rs.500 Cr. per annum for upkeep of NH roads in the State. With the infusion of funds from the Government of India, the wing undertakes the requisite maintenance and development activities as per guidelines/procedures evolved by MoRT&H most successfully by utilising the resources and expertise of various wings, Viz: Highway Research Station, Planning, Designs & Investigation of the State Highways department without incurring time and cost overrun. In order to implement development projects on the line of NHAI, improvements are still required to be taken up to a large extent with regard to NHs entrusted to the State. To undertake such development works of higher values on a fast track basis, I had indicated the willingness of the State Government for a suitable reduction in centage/agency charges. **Accordingly, the State NH wing may be entrusted with the Higher Value NH development projects of NHAI for implementation and maintenance considering the State's potential to handle the large size projects and expertise in the field of highway development.**

11. CLEARANCE OF PROPOSAL FOR THE FORMATION OF CHENNAI PERIPHERAL RING ROAD CONNECTING MAHABALIPURAM AND ENNORE PORT WITH JICA LOAN ASSISTANCE:

The Chennai Peripheral Ring Road was conceptualized to provide better connectivity around the city catering to future traffic requirements and provide efficient commercial transportation by enhancing port connectivity. This road will facilitate container movement from southern districts along the East Coast Road. **Chennai Peripheral Ring Road is one of the major projects included in VISION Tamil Nadu 2023.**

Chennai is being increasingly recognized as a prime export hub for automobiles in South Asia. The proposed project would further facilitate the expansion of the city limits and housing of lot more industries for the overall economic development of the State. **The proposed CPRR would provide unhindered transport connectivity to Chennai and Ennore Ports.** This would also act like emergency corridor in case of inner roads getting clogged.

The proposal for formation of 142 km of Chennai Peripheral Ring road (CPRR) connecting Mahabalipuram and Ennore Port including Minjur Bypass was sent to Government of India on 24.11.2016 for obtaining financial assistance from JICA. The

Chairman NHA and the Chief Engineer (P-7) have sent their appraisal / remarks on DPR to MoRT&H (PPP Zone). The matter is pending with MoRT&H (PPP Zone). The proposal has now been included in the Rolling Plan of JICA and JICA has deployed a survey team to carry out the study. **State Government has already initiated land acquisition for the project and sanctioned Rs. 951 Crore for LA for one section of Project Highway.**

Though the project has been included in the rolling plan of JICA, the project could not be commenced for want of clearance from MoRTH. MoRTH has been addressed recently on 02.11.2017 to send its clearance. MoRTH has to clear the proposal at the earliest to expedite the project as this will significantly improve the Port connectivity.

12. REIMBURSEMENT OF AMOUNT SPENT BY THE STATE GOVERNMENT ON THE NATIONAL HIGHWAYS ENTRUSTED TO NHAI DUE TO NON MAINTENANCE:

- a. Reimbursement of Rs.16.50 Cr. towards the maintenance works carried out in NH-45C, NH-47, NH-226 and NH-227 with the State Fund in 2013.
- b. Reimbursement of Rs.5.05 Cr. towards the Maintenance of the stretch between Padi and Tirunindravur (NH 205) with the State Fund in 2013
- c. Reimbursement of Rs.86.80 Cr. for improvement of NH road stretches in bypass portions in Dindigul-Theni (NH 45 E) and Theni-Kumuli (NH 220) section in 2014.
- d. Reimbursement of 50% of cost of construction (Rs.161.14 Cr.) towards the construction of 3 Nos. of Grade Separators viz: (i) Kuranguchavadi & AVR Roundana,
(ii) Thiruvagoundanur and (iii) Salem Steel Plant in Salem bypass (NHAI project highway) by State Highways Department.

MAINTENANCE OF CHENNAI ENNORE – MANALI ROAD IMPROVEMENT PROJECT (EMRIP)

a. Chennai Ennore – Manali Road Improvement Project was taken up to improve the connectivity to Chennai and Ennore Ports at a Cost of Rs.600 Crore. It is a strategic project aimed at easing the traffic towards Ports, besides relieving the city bound traffic. This would boost the operation of both Chennai and Ennore Ports.

b. Road works have been completed long back and the roads are currently in bad shape with accumulation of earth, protruding median bushes and potholes due to non-maintenance. A maintenance contractor is an essential and immediate necessity.

c. Balance work to a tune of 25 Crore is to be carried out. There were lot of resistance from local public in two isolated locations and all of them have been cleared after long struggle.

All the encroachments have been cleared and PAFs have been shifted from the project site three months back and work front was made available. However, the works have not been commenced. The work in the left over stretch needs to be commenced early and expedited.

d. The State Government will be publishing the toll notification shortly for EMRIP as discussed during the recent board meeting of EMRIP.

14. NOC FOR STATE PWD PROJECTS FROM NHAI

a. Construction of surplus course from Korattur Tank along service road of Chennai Bypass in Tiruvallur District.

The Government of Tamil Nadu has sanctioned the Environmental Improvement and Flood Alleviation and Improvements to Storm Water Drainage Systems in Chennai Metropolitan Area.

The National Highways Authority of India has been requested to grant No Objection Certificate for providing cut and cover vents through the service road on both sides of Chennai Bypass Road from Km 30/4 to Km 31/4 for taking the surplus course from Korattur Tank in Ambattur Taluk in Tiruvallur District. The project proponent informed NHAI about the inundation of surplus water in and around Kathirvedu Village during the floods and requested to grant No Objection Certificate for providing cut and cover channel along the service road. Further, as accepted by the Project Director, NHAI during the joint inspection, proposal has been sent in this matter and NHAI is yet to grant the No Objection Certificate to Public Works Department.

NHAI should grant the NOC expeditiously for the construction of Cut and Cover Channel along the service road Chennai Bypass.

b. CONSTRUCTION OF A BRIDGE IN IMPLEMENTING PROJECT OF INTERLINKING TAMIRABARANI, KARUMENIYAR AND NAMBIYAR RIVERS IN TAMIL NADU

The Government of Tamil Nadu is executing the intra-State linking of Tamirabarani, Karumeniyar and Nambiar rivers in Tirunelveli and Thoothukudi Districts to supply water to the drought prone areas.

The National Highways Authority of India (NHAI) has to construct a bridge in NH-7 at Ponnakudi Village situated near Tirunelveli Corporation as a deposit work at a cost of Rs.11.25 Crore. The project proponent has requested the NHAI to grant No Objection Certificate and to issue a demand notice to enable the project proponent to deposit the amount with NHAI to commence and complete the work quickly.

NHAI may expedite the grant of No Objection Certificate and issue the demand notice to Tamil Nadu, Public Works Department to take up the Bridge work as deposit work.

15. DEVELOPMENT WORKS UNDER SAGARMALA

a. Developing Infrastructure at Cuddalore Port

Tamil Nadu Maritime Board has taken up the development of Cuddalore Port infrastructure at a cost of Rs.115 Crore under Sagarmala / Coastal Berth Scheme. The scheme was approved by Ministry of Shipping vide their letter No. SM-25021/124/2016-SM, dated 27.02.2017 and released Rs.28,75,00,000/- (Rupees Twenty Eight Crore Seventy Five Lakhs only) to Tamil Nadu Maritime Board.

Tendering and award of work is expected by January 2018.

The Ministry of Shipping has been addressed for obtaining revised administrative approval for Rs.135 Crore (an increase of Rs.20 Crore) with revised Detailed Project Report prepared by Indian Institute of Technology Madras.

Sanction of Revised Estimate is awaited from the Ministry of Shipping.

**b. Development Of Passenger Jetty At Kanyakumari Port
(At The Vivekananda Rock Memorial Side)**

To reduce congestion of passengers and faster turnaround of ferries at Vivekananda Rock, a proposal for construction additional passenger ferry jetty (Approximate Length – 68 metres) has been sent to the Ministry of Shipping at a project

cost of Rs.20 Crores. The detailed Project Report has been already submitted and the project has been approved in principle by the Ministry of Shipping.

As per the suggestion from the Ministry of Shipping, Flume Test is being carried out by IIT Madras and their report is expected by 30th November 2017.

The Project needs to be formally approved and necessary funds sanctioned.

16. ADDITIONAL PROJECTS PLANNED UNDER SAGARMALA

a. Expansion and Modernisation of Kanyakumari Port– Cruise Tourism (INNOVATIVE SCHEME)

Kanyakumari is the southernmost tip of Peninsular India, and is surrounded on three sides by the Sea. Kanyakumari town is a popular tourist destination.

Swami Vivekananda visited Kanyakumari in 1892, prior to his Chicago trip to take part in the 1893 ‘World Religious Conference’. It is said that he meditated on the rock for two days and attained enlightenment on the rock. A memorial was built in 1970 in honour of Swami Vivekananda. The memorial is maintained by Vivekananda Kendra.

Thiruvalluvar, was a celebrated Tamil poet and philosopher. He is best known for *Tirukkural*, a collection of 1330 couplets or kurals on ethics, political and economical matters, and love dealing with the everyday virtues of an individual. The text is considered as one of the finest works of the Tamil literature and according to traditional accounts, it was the last work of the third Sangam around 300 BC. Tamilnadu Government has installed a stone statue 133 feet high for Iyyan Thiruvalluvar on a rock adjacent to the Vivekananda Rock.

A boat cruise operated by M/s Poompohar Shipping Corporation Ltd, is the only way of transport to these places and makes the trip more enjoyable to visitors/tourists/pilgrims. Around 30 lakh tourists visit these rocks every year.

The existing Kanyakumari Port with limited berthing facility has a dredged depth of 2 metres only. To develop as a Tourist hub, it is proposed to expand and modernise the Kanyakumari Port with modern berths, Cruise vessels and Tourist transit station facilities. Dredging the entrance of this port and basin to 6 metres would improve vessel movement and then increase Cruise Tourism by sea to other destinations like Trivandrum, Rameswaram, Puducherry, Chennai etc.,

The estimated project cost is Rs.340 Crore.

b. Connecting Vivekananda Memorial Rock with Iyyan Thiruvalluvar Statue Rock through a Marine Bridge (INNOVATIVE SCHEME)

Tourists visiting Kanyakumari visit Vivekananda Rock memorial and Iyyan Thiruvalluvar Statue which are located in islands at a distance of 150 metres and does not have connectivity.

To provide a sea view and a memorable visit for the tourists at Kanyakumari, it is proposed to construct a Modern Marine elevated Steel Cable Bridge at a rough cost of Rs.125 Crore for safe transport of tourists from Vivekananda Rock to Thiruvalluvar statue at a safe height.

c. Road Connectivity from existing Cuddalore Port to NH-45 A (East Coast Road) at North and South entries (two locations) – (BHARATMALA)

Cuddalore Port is being developed into a Deep Water Port under the existing Sagarmala / Coastal Berth Scheme at an estimated cost of Rs.135 Crore.

The Port is located at a distance of 1 km from the National Highway NH 45A (Villupuram – Puducherry – Nagapattinam).

To provide proper road connectivity to Cuddalore Port from the existing National Highway (NH 45 A) without affecting public

transportation, a dedicated, elevated, Reinforced Concrete Overbridge at two locations are to be constructed at a cost of Rs.400 Crore (Rs.200 Crore each).

This will facilitate faster turnaround of cargo handled at Cuddalore Port and also will not disturb the existing public transportation.

d. Providing Railway Siding at Cuddalore Port (INNOVATIVE SCHEME) :

Cuddalore Port Junction is located 2 KMs from the existing Cuddalore Port. This junction has a rail connectivity to

- (i) Villupuram-Chennai
- (ii) Vridhachalam-Tiruchirapalli
- (iii) Chidambaram-Tiruvarur-Thanjavur

The rail connectivity from Cuddalore Port Junction to the port was abandoned from late 1980s. It has a length 4 KMs only which needs to be revived and the cargo handled at Cuddalore Port can be evacuated to achieve faster turnaround of cargo in the port. To develop this Railway siding, a Rail Over Bridge (ROB) in NH 45 A at Cuddalore Old Town have to be constructed.

The estimated cost of the above is Rs.65 Crore.

e. Improvement of existing Pamban Channel to ensure East-West connectivity for medium size vessels (INNOVATIVE SCHEME)

The Pamban Channel is an ancient channel which is used by sea borne trade for smaller vessels. It connects Palk Bay and the Gulf of Mannar and hence provide East – West Connectivity of India by sea. The existing depth in the channel is only 2.0 metres. The old railway bridge having a Scherzer Opening Span (35 metres wide) was constructed 100 years ago, is operated manually without any change over the years and is presently opened only once a week for few hours by Southern Railways, to avoid excessive wear and tear. The centre span of Road Bridge connecting Rameswaram with main land is at height of 16.5 metres from Mean Sea Level which is sufficient for medium size vessels. Without a proper opening in the sea route at the South near Pamban, the Sagar Mala literally will not be completed per se.

In the absence of any other channel in the Southern part of India, it is essential to provide sea borne East-West connectivity to medium size vessels which are backbone for Coastal Cargo movement at Pamban. It is proposed to improve the existing Pamban Channel by carrying out Capital Dredging (upto – 10

metres), laying of buoys in the Channel, changing the opening span of the rail bridge with a mechanised and automatic systems, etc., at a cost of Rs.350 Crore.

f. Development of Infrastructure at Rameswaram Port for Passenger Ferry Service (INNOVATIVE SCHEME):

Rameswaram is a pilgrimage place and attracts a large number of tourists and pilgrims every year. Presently, there are no port related infrastructures to handle cruise vessels / passenger ferries. Development of basic infrastructure will not only promote domestic tourism but also will promote international ferry service.

The Indian Institute of Technology, Madras had prepared a Preliminary Project Report for operationalisation of ferry service especially the ferry service between India and Srilanka from

Mukkundaraya Chatram (near Rameswaram) to Thalaimannar.

Historically, the Indo-Sri Lankan Ferry Service was taking place from Dhanushkodi to Thalaimannar and vice versa with both the ends having suitable jetty and requisite berthing facilities for the purpose.

The cyclone of 1964 destroyed all the infrastructure facilities at Dhanushkodi and thereafter, it was operated from

Rameswaram to Thalaimannar. The landfall point of the wooden jetty at Rameswaram had all civil infrastructure such as baggage godown, a passenger transit shed, offices for customs, immigration, port health, revenue etc., The entire complex comprising a port office was also available with requisite water and power supply and was well connected by road to the National Highways. This facility was in full use till 1984 when the Government of India directed to suspend the operation on account of ethnic disturbance in Sri Lanka. Therefore, it is necessary that a fresh site needs to be developed meeting the above requisite parameters for the ferry service, including an open sea jetty with alongside facility for a passenger ferry.

Construction of RCC jetty, all civil infrastructure such as baggage godown, passenger transit shed, offices for customs, immigration, port health, revenue etc., have to be developed at an estimated cost of Rs.100 Crore.

17. SUGGESTIONS ON SAGARMALA FUNDING PATTERN

Presently, the financial assistance by the Ministry of Shipping under the Sagarmala scheme is upto 50% of the total project cost.

For Tamil Nadu, with more potential for industrial growth the projects identified are innovative and having national importance which will fulfil the vision of Government of India under Sagarmala and Bharatmala. This initiative will develop and attract Cruise Tourism to a large extent. It will attract the small and medium traders, Indian ship owners operating with smaller vessels and improve the Coastal Shipping by providing a Modal Shift of Cargo from the Road/Rail Sector. It will also attract building and operation of more smaller vessels along the coast under the Hon'ble Prime Minister's **'Make in India'** Scheme

In view of the innovative components in the scheme which provides a strong infrastructure and Strengthening of Security in the Southern Part of India, financial assistance from the Ministry of Shipping can be increased upto 100% on all the above INNOVATIVE Schemes.

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