No. 39011/12/2017- Toll GOVERNMENT OF INDIA MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

(Toll Zone)

Transport Bhawan, 1, Parliament Street, New Delhi- 110001.

Date:15.05.2018

To,
The Chairman,
National Highways Authority of India,
G-5 & 6, Sector 10, Dwarka,
New Delhi- 110075

{Kind Attention: Sh. Rohit Kumar Singh (Member, Finance)}

Subject: Implementation of Electronic Toll Collection (ETC) Programme in India- FASTag issuance vehicle classification document reg.

Reference: Letter No. IHMCL/ETC/Operations/2017/116335 dated 17.04.2018

The proposal, that is the "Vehicle classification document" was perused in this Ministry and the following comments are made in this regard: -

- NPCI /IHMCL shall ensure that the "Mapper class/ Tag class" assigned to each category of vehicles shall adhere to the notification no. 728(E) dated 18.10.1996 scrupulously.
- GVW indicated in the Registration Certificate (RC) and physical verification of no. of axles shall be the sole criteria for assigning the tags to the respective tag class vehicles.
- Passengers carrying capacity of commercial passengers carrying vehicles does
 not require any verification in order to issue FASTag. Hence, the passenger
 carrying capacities of different passenger vehicles is to be removed from the
 guideline.
- 4. Mapper vehicle class 20 shall be known as Light Motor Vehicle having GVW <= 7.5 tonnes. And therefore, all Motor vehicles (commercial/personal) having GVW <= 7.5 tonnes shall be tolled as category 1. i.e. car/jeep/van or LMV of the National Highways Fees (Determination of rates and Collection) Rules 2008.</p>
- 5. User fee collection from 3 axle vehicles (Bus/ Truck) shall be done under the "There axle commercial vehicle" class of vehicles in NH Fee Rule 2008 with GVW exceeding 16.2 tonnes but <= 25 tonnes.</p>

- 6. GVW for truck 4 axles shall be in the range of exceeding 25 tonnes and <=36.6 tonnes.
- 7. GVW for oversized vehicles (7 or more axle) has not been defined in the notification dated 18.10.1996. However, for the purpose of classification. Vehicles physically verified with no. of axle >7 / oversized for transporting certain materials and with GVW > 54.2 tonnes in the RC shall be tolled as per class 6 i.e. oversized vehicles of NH Fee Rule 2008.
- GVW has not been defined in the notification dated 18.10.1996 for Earth having machinery and Heavy construction machinery. However, they shall be tolled under class 5 as defined in Rule 4(2) of NH fee rule 2008.
- 2. In view of the above, Ministry may have no objection on the "Vehicle Classification Document" for circulation to tag issuing banks for issuance of FASTag subject to adhering to notification dated 728 dated 18.10.1996 and Ministry's observations above.

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FASTag Issuance Vehicle Classification Document

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About NETC Program

Government of India has undertaken an initiative to build India's highway network. This emphasises the need for instituting toll collection points on large scale, which leads to a framework for creating an automated and interoperable electronic tolling structure across the country's highway network.

Indian Highway Management Company Ltd. (IHMCL) is engaged in the maintenance of National Highways of India and as part of this endeavour, National Highway Authority of India (NHAI) has given the responsibility to IHMCL for implementing Electronic Toll Collection (NETC) system at toll plazas of National Highways.

NHAI/IHMCL has authorized NPCI for providing a composite solution on Electronic Toll Collection which would take care of the clearing and settlement of electronic toll transaction to make it interoperable and secure.

NETC program aims to establish a non-stop toll regime in which a vehicle with a FASTag can pass through toll plazas on Indian highways and pay toll without actually stopping. The program started on 3rd December 2016, since it has grown exponentially.

Background

The FASTag Program was started by IHMCL & ICICI bank in 2013. At that time, most of the toll plazas were operating on proprietary Toll Management System and it was important that all of them follow a single ETC specification. IHMCL released the ETC specification (Interface Control Document) version 2.4 which lays down the specifications & the process to be followed between the acquiring bank & the toll plaza. As a part of the process, there are 20 type of vehicles classes which are mapped by the acquiring bank at the time of toll plaza integration. NHAI has issued a maximum of 7 type of vehicle class for calculation of toll fare. At the time of integration, the plaza operators provide the master data sheet which has a clear mapping of these 20 vehicle class to the 7 NHAI vehicle class.

During the last one year, it has been observed that there has been multiple cases, where Issuer banks have issued a wrong FASTag to their customers. The issuers have demanded a simple document which clarifies the vehicle classification so that they issue the right Tag. The Issuer Banks want clear directive on how to identify the Vehicle class on the basis of:

- 1. RC copy- which parameters to be considered- gross weight/ seating capacity/ no of axel?
- 2. Visual identification- no of axel

This document describes the issues in detail which are being faced for Tag issuance by the Issuer banks. This also covers a solution of each category of vehicle with Number of Axle and GVW of respective Vehicle as per MoRTH Notification **S.O. 728 (E) dated 18.10.1996.**

This document requires approval from competent Authority for circulation for FASTag issuance.

Definitions

a) Mapper Vehicle Classes

NETC Mapper is a repository of NETC Tag IDs maintained by NPCI and NETC Switch is used for the purpose of switching NETC transactions to the member banks. This contains below vehicle classification. Toll fare is calculated basis the mapper vehicle class.

Mapper Vehicle Class	Vehicle Class Description
1	Two wheeler
2	Three - Wheeler Passenger
3	Three - wheeler Freight
4	Car / Jeep / Van
5	Light Commercial vehicle 2-axle
6	Light Commercial vehicle 3-axle
7	Bus 2-axle
8	Bus 3-axle
9	Mini-Bus
10	Truck 2 - axle
11	Truck 3 - axle
12	Truck 4 - axle
13	Truck 5 - axle
14	Truck 6 - axle
15	Truck Multi axle (7 and above)
16	Earth Moving Machinery
17	Heavy Construction machinery
18	Tractor
19	Tractor with trailer
20	Tata Ace or Similar Mini Light Commercial Vehicle

b) Tag Vehicle Classes

Tag class is as per the vehicle class defined under NETC program and tolling categories of the toll plaza. There are 7 Tag classes as per tolling class at the toll plaza of National Highway. These classes are written on FASTag. Issuer can identify the Fastag with classes written on the tag. Toll plaza system also identifies the FASTag class.

Tag Class	Class Description						
4	Car / Jeep / Van/ Tata Ace and similar mini light commercial vehicle						
5	Light Commercial Vehicle						
6	6 Three Axle Commercial Vehicles						
7	Bus/Truck						
12	4 to 6 axle						
15	7 or More Axle						
16	16 Heavy Construction Machinery (HCM)/Earth Moving Equipment (EME)						

c) Gross Vehicle Weight Rating (GVWR)

The gross vehicle weight rating (**GVWR**), or gross vehicle mass (GVM) is the maximum operating weight/mass of a vehicle as specified by the manufacturer including the vehicle's chassis, body, engine, engine fluids, fuel, accessories, driver, passengers and cargo.

Reference -

MoRTH Notification S.O. 728 (E) dated 18.10.1996 for Vehicle Classification on GVW and Axle

Requirement

Since start of the program, we observed below challenges that are faced by various stakeholder in the existing system.

- FASTag is issued basis Axle of vehicle which is not written on Vehicle Registration certificate. GVW is always mentioned on the Vehicle registration certificate.
- > Tolling is done basis Axle of the vehicle but RC copy follows the GVW.
- > Due to this difference, Issuer Banks are finding difficulty in identifying the correct vehicle class of vehicle for FASTag issuance. This is resulting in customer complaints and disputes between Bank and concessionaire.
- ➤ GVW of Vehicle type "7 Axle and more", Earth Moving Machinery and Heavy Construction Equipment is not available in notification. Passenger carrying capacity of 3 Axle Bus is also not available. This needs to be clarified that Tolling of Bus 3 Axle shall be done under Bus 2 axle category or separate category.
- ➤ There is Vehicle category defined as LCV 3 Axle which is not defined in any document. Clarification is requested to identify this type of vehicle. Since start of the program, we have not observed any such vehicle.

In order to bring clarity for FASTag issuance, the below clarification is being proposed with pictorial presentation of vehicle with Axle count and GVW against each mapper class and Tag Class, so as to make the issuers accountable for the right tag issuance.

FASTag Vehicle Classification

Tag Vehicle Class	Vehicle Class Description	Mapper Vehicle Class	GVWR	No. Of Axle	Sample Image
NA (No Fastag Applicable)	Two wheeler	Mapper Class (1)	No Fastag is issued	NA	
NA (No Fastag Applicable)	Three - Wheeler Passenger	Mapper Class (2)	No Fastag is issued	NA	
NA (No Fastag Applicable)	Three - wheeler Freight	Mapper Class (3)	No Fastag is issued	NA	

Tag Vehicle Class	Vehicle Class Description	Mapper Vehicle Class	GVWR	No. Of Axle	Sample Image
Tag Class (4)	Car / Jeep / Van	Mapper Class (4)	GVW <=7,500 Kgs	NA	Terminal ICA
	Tata Ace or Similar Mini Light Commercial Vehicle	Mapper Class (20)		NA	ATTRICTURE OF THE PARTY OF THE

Tag Vehicle Class	Vehicle Class Description	Mapper Vehicle Class	GVWR	No. Of Axle	Sample Image
Tag Class	Light Commercial vehicle 2-axle	Mapper Class (5)	GVW >7,500 Kgs but	2 Axle	Axle 1 Axle 2
(5)	Mini-Bus	Mapper Class (9)	<= 12,000 Kgs	2 Axle	Axle 1 Axle 2

Tag Vehicle Class	Vehicle Class Description	Mapper Vehicle Class	GVWR	No. Of Axle	Sample Image
Tog Class	Bus 2-axle	Mapper Class (7)	GVW > 12,000 Kgs but <= 16,200 Kgs	2 Axle	Axie 1
Tag Class (7)	Truck 2 - axle	Mapper Class (10)	GVW > 12,000 Kgs but <= 16,200 Kgs	2 Axle	Axie 1 Axie 2 Axie 1 Axie 2

Tag Vehicle Class	Vehicle Class Description	Mapper Vehicle Class	GVWR	No. Of Axle	Sample Image
	Light Commercial vehicle 3-axle	Mapper Class (6)		3 Axle	
	Bus 3-axle	Mapper Class (8)	GVW > 16,200 Kgs but <= 25,000 Kgs	3 Axle	Axle 3 Axle 2 Axle 1
Tag Class (6)	Truck 3 – axle (Rigid)	Mapper Class (11)	GVW > 16,200 Kgs but <= 25,000 Kgs	3 Axle	Axis 3 Axis 2 Axis 1
	Truck 3 - axle (Semi- Articulated)	Mapper Class (11)	GVW > 16,200 Kgs but <= 25,000 Kgs	3 Axle	Azle 1 Azle 2 Azle 3

Tag Vehicle Class	Vehicle Class Description	Mapper Vehicle Class	GVWR	No. Of Axle	Sample Image
	Truck 4 - axle	Mapper Class (12)	GVW > 25,000 Kgs but <= 36,600 Kgs	4 Axle	Axile 4 Axile 3 Axile 2 Axile 1
Tag Class (12)	Truck 5 - axle	Mapper Class (13)	GVW > 36,600 Kgs but <= 45,400 Kgs	5 Axle	Axle 1 Axle 2 Axle 3 Axle 4
	Truck 6 - axle	Mapper Class (14)	GVW > 45,400 Kgs but <= 54,200 Kgs	6 Axle	Axle 6 Sholl 0 Axle 5 Axle 4 Axle 3 Axle 2 Axle 1

Tag Vehicle Class	Vehicle Class Description	Mapper Vehicle Class	GVWR	No. Of Axle	Image
Tag Class (15)	Truck Multi axle (7 and above)	Mapper Class (15)	GVW >54,200 Kgs	7 Axle and More	
Tag Class (16)	Earth Moving Machinery	Mapper Class (16)	NA	NA	
(1.5)	Heavy Construction machinery	Mapper Class (17)	NA	NA	

Tag Vehicle Class	Vehicle Class Description	Mapper Vehicle Class	GVWR	No. Of Axle	Sample Image
NA	Tractor	Mapper Class (18)	No FASTAG is issued	NA	
NA	Tractor with trailer	Mapper Class (19)	No FASTAG is issued	NA	

END OF THE DOCUMENT