

# Revived Automatic Toll Collection Systems In India – FasTag – A Environment Friendly Option

India is a country with the second largest road network in the world. Out of the total stretch of 5.4 million km of road network, almost 97,991 km is covered by national highways. The National Highways Authority of India (NHAI), a nodal agency of the Ministry of Road Transport and Highways is responsible for the maintenance and the expansion of the highways. Travelling on these state/national highways also known as toll roads require a tax to be paid called the Toll Tax. The government spends the taxes collected by means of toll roads usage on the maintenance of these roads so that the drivers and the riders can travel comfortably.

The challenges associated with the conventional tolling process are as follows:

- Limited number of toll booths leading to slow toll collection process
- Slow toll collection process at the toll booths results in a minimum of 10 minutes average waiting time per vehicle
- Fuel wastage due to long waiting time at the toll plaza
- Air pollution
- Verbal arguments and physical fights among impatient travellers and the toll attendants.
- Toll plaza accidents which happen due to the sudden lane changing by drivers for faster clearance.
- Wastage of time at booths has a negative impact on transport sector as well as the whole economy. A 2016 study by IIM, Calcutta said the country suffers losses of nearly Rs 40,000 crore per year due to delays in transportation. The study also highlighted that, the delays led to consumption of fuel worth Rs 90,000 crore.

These limitations in the conventional toll collection systems called for an immediate revamp in the Indian toll collection machinery. Thus, a step in this direction was taken by National Highways Authority of India (NHAI), a nodal agency of the Ministry of Road Transport and Highways by introducing “FASTag” which employs Radio Frequency Identification (RFID) technology and provides for seamless movement of FASTag affixed vehicles at toll plazas.

## What is FasTag?

FasTag is a radio frequency identification device (RFID), which comes as a reloadable tag that ensures seamless movement of a vehicle on the run on highways. The device has to be registered with Central Clearing House (CCH) operators and the bank account first. And then, it needs to be placed on the vehicle’s windscreen. When the vehicle passes through a toll plaza, the sticker or tag is auto-scanned and payment is instantly deducted from a prepaid account linked to the tag.

## **BENEFITS OF ADOPTING FASTag:**

- A. To the Road Users
  - a. Convenience of cashless payment
  - b. Non-stop motion & reduced commute time
  - c. Online Portal for customers SMS alerts for low balance and toll transactions etc.
- B. To the Toll Operators
  - a. Improved lane utilisation
  - b. Lower operating costs Reduced effort in management at toll plaza
  - c. Better audit control through centralized user accounts
  - d. Reduced use of paper and reduced toll payment hassles
- C. To the Government
  - a. Improves transparency of toll transactions
  - b. Savings on fuel, reduction of emissions from idling and repeated stops at Toll Plazas
  - c. Reduced air pollution
  - d. Reduced use of paper

## **What are the challenges faced by FasTag?**

- FasTag can be stolen or lost: Since the FasTag comes in a tag form, it can easily be stolen or lost. In such a situation, one should never forget to request the agency to block the FasTag account instantly and process re-issuance.
- FasTag may face malfunction or damage: A user can report about the same and ask for a replacement.
- FasTag may not be approved: When there is no amount in the account, no credit is given to the users. Then the user has to pay in cash. Moreover, at times, the RFID scanner goes through technical issues, leaving a FasTag user in a fix to pay the toll amount in cash.
- FasTag faces the issue of discipline at all most every toll plaza: Vehicles without the FasTags enter the designated lane while the ones with FasTags wait for their turn, behind these vehicles.

Though FasTag is seen as an advantageous mode of toll collection system, offering benefits to both – the user and the collector, until the drawbacks or the challenges are not uprooted to the base, the module can face serious crunch. The Government of India needs to consider the challenges faced by FasTag and come up with positive solutions to make the most out of a technologically superior mode of toll collection.

References:

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