

# COOPERATION BETWEEN SLOVAKIA AND NEIGHBOURING COUNTRIES WITHIN ELECTRONIC FEE COLLECTION

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*Summary: Cooperation between the two subjects is important in any human activity and as well as electronic fee collection. It helps to improve all the final indicators. The article deals with the areas of a possible cooperation between Slovakia and neighbouring countries in many fields.*

*Key words: cooperation, electronic fee collection, enforcement, communication*

## 1. INTRODUCTION

Cooperation in electronic fee collection between two countries is very important in many areas. This cooperation should improve the cooperation mainly among operators, national authorities, police bodies and other subjects that participate in the system of electronic fee collection in individual countries. Slovakia would develop this cooperation within electronic fee collection with neighbouring countries, which means Czech Republic, Hungary, Austria and Poland. The cooperation should be developed in the following areas: enforcement, sharing information, communication and technology. In this areas some actions and processes are bound among themselves or they interlock each other. Following chapters present the possibilities of the cooperation among neighbouring countries in details.

## 2. ENFORCEMENT

Enforcement is a very important part of electronic fee collection. Without enforcement all the system of infrastructure tolling wouldn't be effective. Enforcement of the vehicles moving on the infrastructure is connected with the enforcement of penalties for the offences from the drivers. It is also connected with the creation of reliable evidence about the offence. The offence can be proved only by reliable and effective technological devices (cameras, sensors), which register the offence. Offence record must contain all the necessary data because of inforcement: exact date and time, when a vehicle passed through the control, current vehicle's speed, maximal speed allowed on that place, code record identification.

For the needs of cooperation it is necessary to create databases with the vehicles', drivers' and vehicle owners' data. So called black and grey list of drivers contain very important information for the enforcement. In the black list are registered drivers

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moving on tolled infrastructure, but they continually avoid toll payment. Grey list is a database of the drivers, who are temporary registered in the toll system. It is important that also the operators from neighbouring countries would have access to these databases. It would speed up their communication to become effective. Quick and effective data sharing would be allowed so.

## **2.1 Enforcement actions**

Cooperation would be focused on the following actions:

- what data can toll collection operators in each country ask from the drivers or vehicle owners,
- detailed definition and explanation of data for all the participating parts (all subjects that will anyhow work with the information /toll collection operator, contract provider and others/),
- detailed list of offences and their clear,
- creation of the black list of drivers,
- creation of the grey list of drivers,
- updating of the grey list of drivers,
- possibility to ask the information from other authorities,
- cooperation with policy in the matter of offenders' retention,
- cooperation with other national authorities for operation and control of road traffic,
- awareness of operators about the possibility that a driver passes borders and does not pay the fee,
- to manage databases with the information about vehicle owners, drivers and vehicles on the operators' level,
- to control through the mobile control units for the enforcement of vehicles moving on the enforced infrastructure,
- how should the operators act if they realize the offence committed by a driver who resides in that country,
- how should the operators act if they realize the offence committed by a driver who does not reside in that country,
- possibility to stop a vehicle or not allowed him to continue to drive.

## **3. SHARING OF INFORMATION**

This area should be focused in details on the manner of sharing of information. Concretely it is about the information the operators can share among themselves. Cooperation between the toll collection bodies and national authorities in individual countries and also the work of national authorities among neighbouring countries would be very important in this area. The above mentioned need and request concerns international cooperation within the European Union. When sharing the information between the two operators, it will be necessary to define their exact and objective function: the manner of information collection, classification, processing,

insuring and saving. It is important to insure the information before they are modified in favour of an offender.

### **3.1 Enforcement actions**

Cooperation would be focused on the following actions:

- what are the information the two collection operators can share,
- what are the information the collection operator and contract provider for drivers can share,
- possibility of information sharing between an operator and national authorities concerning penalty enforcement and control,
- awareness of Police of Slovak republic,
- to immediately provide information to Police of Slovak republic, if the toll collection operator realizes that there is a stolen or looked for vehicle on the infrastructure,
- information sparing between national authorities concerning enforcement system.

## **4. COMMUNICATION**

Communication is a very important part of electronic fee collection system. In this area the cooperation should focus on finding an effective way of communication mainly among operators as well as other subjects, which appear in the system. It is also necessary to insure the network to avoid its damage. For the needs of enforcement it would be good to manage and use an existing programme of information sharing eNFORCE.

### **4. 1 Communication actions**

Cooperation would be focused on the following actions:

- to propose and create the way of communication among operators, providers and between collection operators and providers,
- to provide a common way for a provision of a communication network,
- protection degree against damage, not allowed access of the third person, insuring implementation manners, data protection provision by authorisation,
- data protection provision in databases against damage, modification in favour of an offender,
- for the needs of penalty enforcement follow the existing recommendations of eNFORCE,
- to provide for the drivers from another countries announcement about offence in their mother language,
- to define deadline for the penalty payment and administrative fees.

## **5. TECHNOLOGY**

Without modern technology and devices no system can function today. It is the same for the fee collection. Technological devices take indispensable part for the needs of fee collection, enforcement and control. Concerning the technology, there should be a cooperation in construction and installation of technological devices directly on the infrastructure, their testing and operation, awareness of operators about wrong or damaged devices. Experience and information share from the operation of existing devices for neighbouring countries which plan to implement them on their territory, seems to prove important. Experience with implementation and operation of drives registration in payment terminals and filling stations would be really helpful. For the needs of enforcement it is necessary to know the offences that can appear in fee collection process. It is important to define all the situations that may occur and their interpretation. That's why it would be good to inform the operators in neighbouring countries about devices and ways, which are the best and the most effective for the recognition of the concrete offences and illegal activities of drivers.

### **5. 1 Actions in technology**

Cooperation would be focused on the following actions:

- possible cooperation in installation of technological devices before the testing operation is implemented,
- awareness of operator in the case of malfunction of the technological devices,
- awareness of operators themselves about possible malfunctions,
- information sharing about the experience from the operation of enforcement system,
- cooperation and help with installation payment terminals to book drives,
- to define the manners and technologies to (DSRC, GPS) to recognize individual offences committed by drivers in the best way,
- creation of a reliable evidence about the offence,
- sharing of experience with the recognition of offences,
- possible cooperation in the recognition of offences by mobile control units.

## **6. CONCLUSION**

It is up to each state, if it will cooperate with another one. Final decision depends on each state, if it will cooperate in some fields – voluntarily or not. Finally, the cooperation should help drivers and users of charged infrastructure to improve its operation to be more economic, quicker and mainly safer.

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