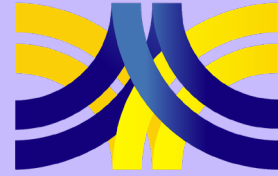


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*Decarbonizing Road Infrastructure : Challenges,  
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ASECAP DAYS

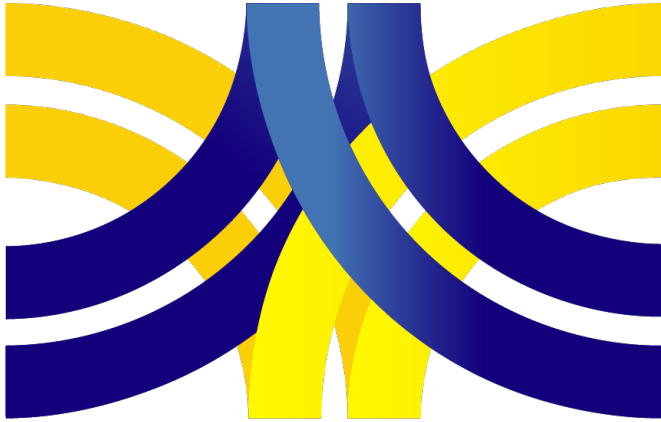


BRUSSELS 2022



Hotel Marriott Grand Place, Brussels  
24 – 25 November 2022

# **ASECAP DAYS**



**BRUSSELS 2022**

**Innovative video tolling system  
as a future-proof solution achieving the  
best user experience in the tolling process**

**Paolo Guarnieri**

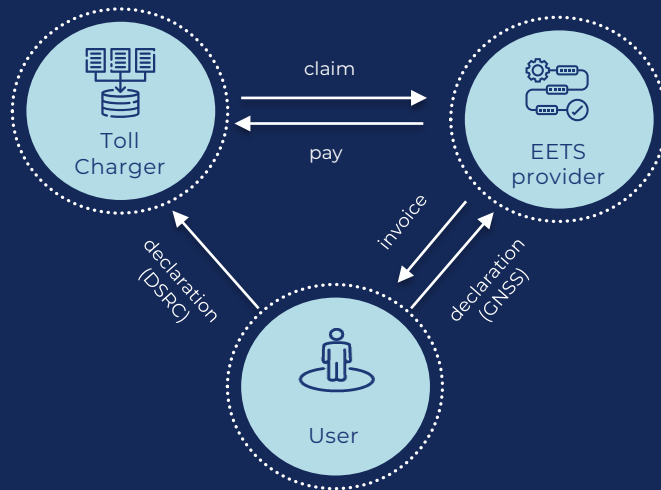
Business Development, Movyon  
Autostrade per l'Italia Group



# Video tolling system

Toll payment is based on **vehicle identification through automatic license plate recognition** without the need for any on-board unit. The solution can be integrated into both Stop & Go and Multi Lane Free Flow systems.

## EETS stakeholders and business model



## Video tolling key features

- Front and/or rear plate reading
- OCR technology suitable for different countries and plate type
- Central platform managing interactions with users, toll charger and service provider

# The Italian motorway network: a complete national closed system

- The **biggest closed** tolling system in Europe, with **6,000 km** of **interconnected** toll motorways, managed by **25 concessionaries**.
- **Electronic Toll Collection:** about **65%** out of total transactions
- The Italian motorways concessionaires signed in 1992 an **Agreement** for the **Interconnected Management of the entire Network**



# Video tolling in a closed interconnected system

## CHALLENGES:

- **Identifying the journey** in order to charge the customer in a closed system involving more than 20 concessionaries,
- Implementing a **platform** ensuring **technical and commercial** data exchange **among all the concessionaries**.

## OPPORTUNITIES:

- A whole electronic tolling system represents a step toward a seamless driving experience and a more innovative and sustainable mobility.
- **Introducing video tolling** in the Italian network can be the first step to reaching **the total dematerialization** of the entrance **ticket**.

# Video tolling pilot project in Tangenziale di Napoli

**Project:** implementation of a platform specifically designed to allow Toll Chargers and video tolling Service Providers to exchange data, perform algorithms and support all the steps needed to manage this innovative tolling system in a complex scenario.

**Target:** dematerialization of the Rechargeable Telepass OBU in favour of an advanced digital payment system enabling cutting-edge services that improve the travel experience and ensure high performances



- **Location:** Tangenziale di Napoli
- **Customers:** existing users having Rechargeable Telepass OBU (~19.000)
- **Technology:** vehicle identification through front and rear number plate reading
- **Start date:** October 2022
- **Roll out:** in two phases
  - 1 parallel operation of rechargeable Telepass and video tolling system for a smoother transition
  - 2 full renewal of the lanes towards a free-flow configuration

# Video tolling early adoption: a success story in A4 Katowice-Kraków (Poland)

2013

## START OF MANUAL TOLL SYSTEM

- Renewal of 16 existing toll lanes
- 2 toll stations

2016

## ELECTRONIC TOLL COLLECTION

- Introduction of **Stop&Go ETC** (CEN TC278 standard)
- Go-Live of CSP and Web channel for the distribution of prepaid OBU and prepaid RFID card

2019

## VIDEO TOLLING

- Introduction of a video tolling system in 6 lanes (service provided by **AutoPay** exclusively)
- Service extension to cover a total of 29 lanes

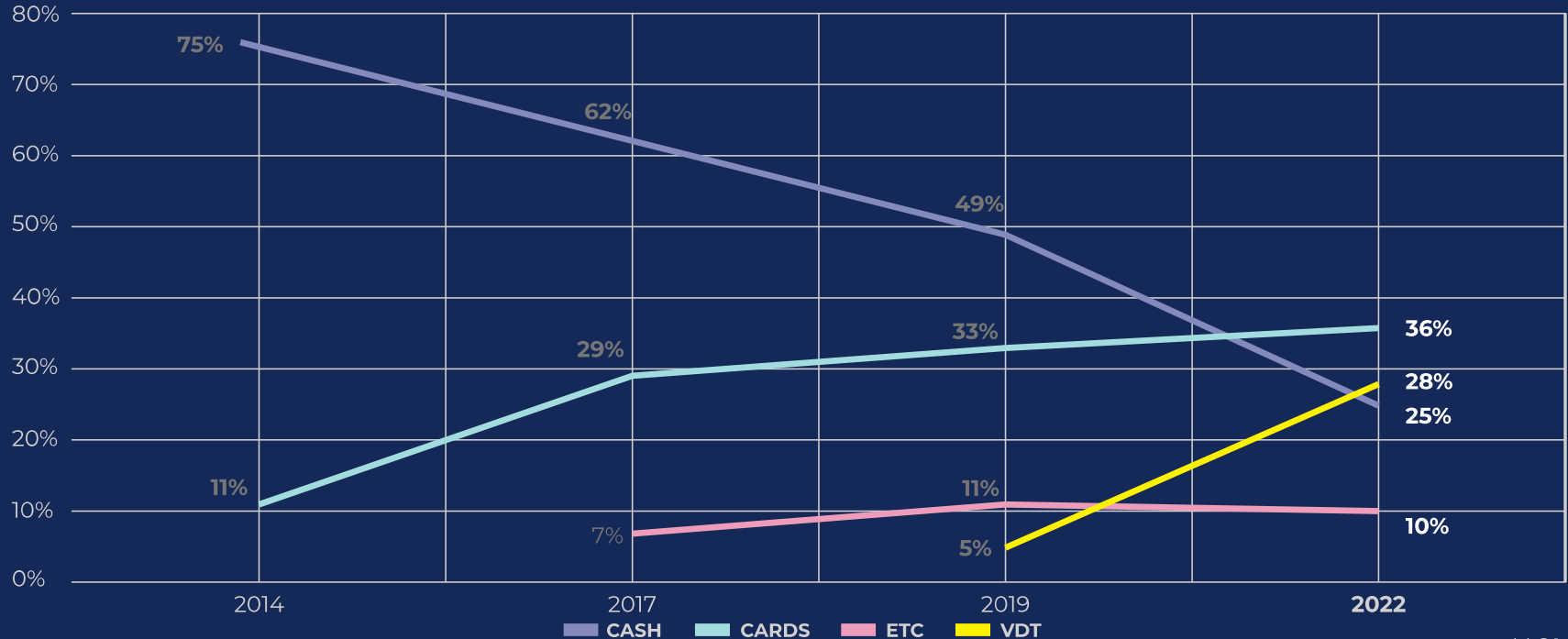
2020

## NEW SERVICE PROVIDERS

- Introduction of other Video Tolling Service Providers: **Skycash, mPay, PKO BP Finat, Shell**

# Video tolling early adoption: a success story in A4 Katowice-Kraków (Poland)

## TREND OF PAYMENT METHODS







# Benefits for Toll Chargers



Reducing queues and traffic jams, minimizing pollutant emissions

Cost reduction of money collection through dematerialization and automatic vehicle identification

Automatic License Plate Recognition (ALPR), thanks to efficient AI-based algorithms, is becoming increasingly accurate

# A seamless tolling experience for users



Reduction of queues  
and traffic jams

Digitization of tolling and  
dematerialization of tickets

Immediate registration of  
new users in the system

# MOVYON

Autostrade per l'Italia Group

## DIGITAL ENGINEERING FOR SMART MOBILITY

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### Our numbers



### Our solutions



Traffic e Safety  
Management



Infrastructure  
Management



Tolling

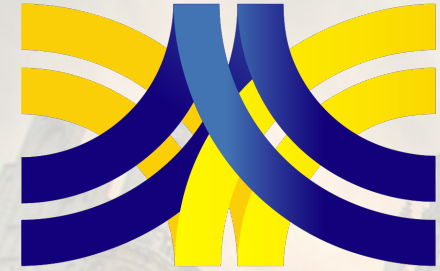


Smart  
Cities



Smart  
Roads

**ASECAP DAYS**



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**THANK YOU FOR  
YOUR ATTENTION**

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