ASFINAG



2nd MEETING OF ROAD EXECUTIVES NETWORK

28 May 2024

Vienna, Austria

Tolling in Austria

Dr. Anton Sieber MBA

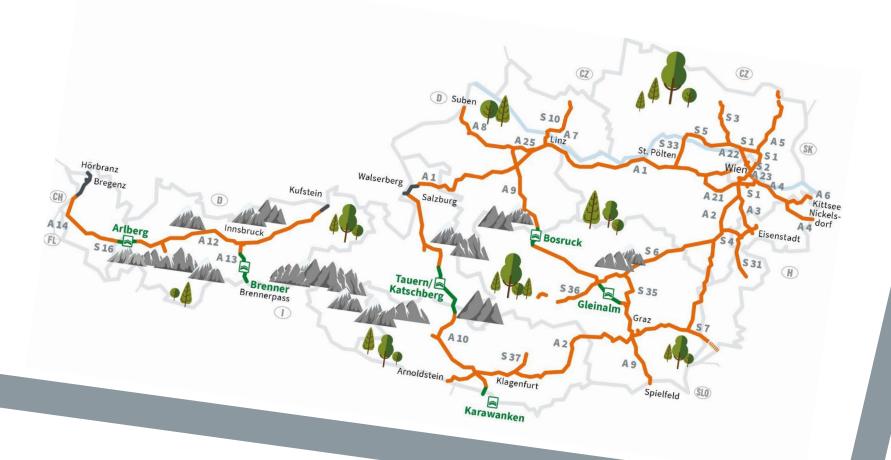
Managing Director

ASFINAG Commercial Services GmbH

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~3,200 Employees

6 Toll stations

9Traffic management centres

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32.65 billion

km of total traffic per year **2,265** kilometres of road network

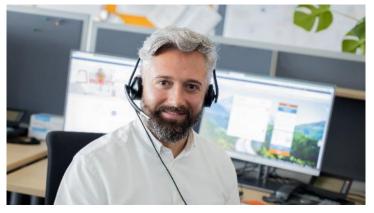
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Motorway operation and maintenance facilities



MAUT SERVICE GESELLSCHAFT – CORE AREAS







TOLL COLLECTION

Maut Service Gesellschaft (MSG) is responsible for collecting tolls. This includes passenger vehicle toll (time and distance-related) and truck toll (distance-related). MSG sends out substitute tolls if the toll hasn't been paid accordingly. It also caters to a large sales partner network.

CUSTOMER SERVICES

At our Service Center, well trained staff takes care of our customers' wishes around the clock and in 7 languages.

It furthermore processes complains and organises trade shows and events, among others.

IT SERVICE PROVIDER

With bundled competencies
MSG provides all information
technology services to all companies
for their office locations and
operations on the ASFINAG road
network. MSG is also responsible for
marketing data lines and bandwidths.



MAUT SERVICE GESELLSCHAFT – CORE AREAS



PAYMENT SERVICES

The settlement of GO toll (truck tolls) and passenger vehicle tolls with providers such as fuel, debit and credit cards, Amazon Pay, PayPal and direct debit, as well as the settlement of international tolls via EETS providers falls within the competence of MSG. In addition, MSG processes GO toll crediting and GO toll payments.

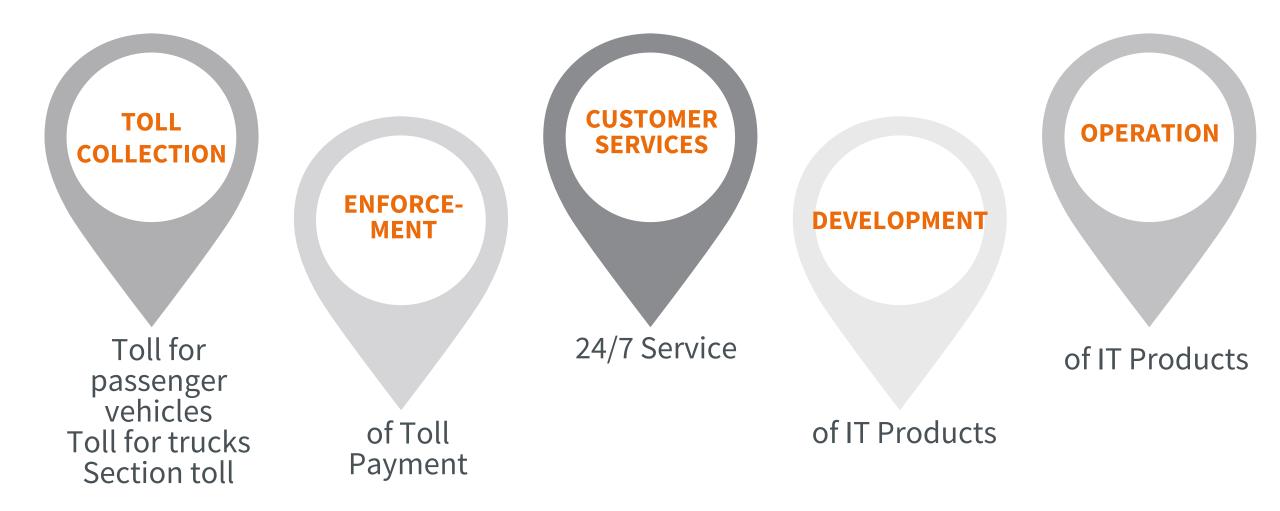


ITS SERVICES

The expansion of the ASFINAG video system and sensor network, the provision of real-time traffic information, the implementations for software solutions for operations, the further development of Cooperative Services (C-ITS) and the support for the introduction of Automated Driving are located in the MSG.



MAUT SERVICE GESELLSCHAFT – TASKS





MAUT SERVICE GESELLSCHAFT - FACTS



Annual vignettes sold – 71 % of which digitally 42.9 million

Section toll clearances



Enquiries at the service centre

812 million

Toll transactions



IT services managed

As of 2023





Company culture Training Employer branding Diversity

WORKING

Working from home Flexible working hours Sabbaticals Parental leave

760 staff members

341

women

407

men

12

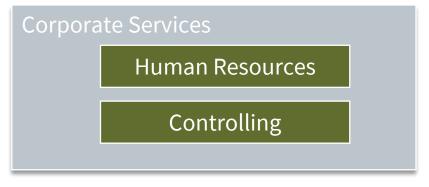
apprentices

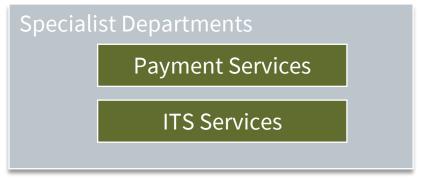
nations

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COMPANY STRUCTURE







Customer Services Toll Collection, Enforcement & Sales Department

Servicemanagement

IT-Operations



COMPANY STRUCTURE



MSG | ASFINAG Maut Service GmbH



FACHBEREICHE

CLAUDIA EDER

Geschäftsführung

BERND DATLER

CORPORATE SERVICES

Human Resources Beatrix Strohmaier

> Controlling Anna Piechocki

Services

Payment Services
Manfred Haase

ITS Services
Manfred Harrer

Kundenmanagement Florian Fila

ASFINAG Service Center Darko Amadori

Beschwerden, Service und Behörden Daniel Neunkirchner Mauteinhebung, Enforcement & Vertrieb Stefan Zangerle

Mautstellen Bosruck, Gleinalm Josef Stimec

Mautstellen St. Michael i.L., Rosenbach Knud Ulrich

Maustellen Schönberg, St. Jakob René Tonini

Enforcement Center Christof Mauerek

> Vertrieb Oguz Kücük

Servicemanagement Christian Göltl

Informationstechnologie und Communications Markus Wanz

> Softwareentwicklung Andreas Helmel

> > Analytics Peter Aubrecht

Maut Services Markus Stotter

SAP Competence Center Stefan Baumgartner

Cloud, AI & Collaboration Services Christian Hausberger Servicebetrieb Andreas Goldnagl

Servicebetrieb-Level 1 Nikolaus Gross

Servicesupport-Level 2 Arthur Kozek

> Service Operation Management Dietmar Kappl

Contract Management Wolfgang Tomek

Infrastructure Services Walter Pleyer

CUSTOMER SERVICES – KEY AREAS



ASFINAG Service Center



Claims, Service, Authorities

TOLL COLLECTION, ENFORCEMENT, SALES – KEY AREAS



Toll stations Bosruck, Gleinalm



Toll stations
St. Michael i. L.,
Rosenbach



Toll stations Schönberg, St. Jakob



Enforcement Center



Sales Department

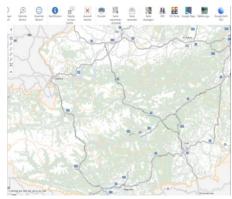
SERVICEMANAGEMENT – KEY AREAS



IT Communications



Software-Development



Analytics, Data Science, GIS



Toll Collection Competence Center



SAP Competence Center



VMIS Competence Center



Tunnel Competence Center



Integrated Products

IT-OPERATIONS – KEY AREAS



Service Support Level 1



Service Operations Level 2



Service Operation Contract Management



Management



Infrastructure Management

ITS SERVICES – KEY AREAS



Expansion of ASFINAG's video system and sensor network



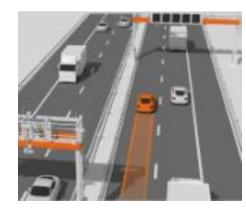
Provision of real time traffic information via ASFINAG's services and it's cooperation partners (e. g. VAO, automotive industry ...)



Implementation of software solutions for operation (e.g. incident management)



Development and deployment of cooperative services (C-ITS)



Support in implementation of automated driving

PAYMENT SERVICES - KEY AREAS

HANDLING ELECTRONIC PAYMENT TRANSACTIONS











Debit and credit Cards

- ➤ GO toll
- Section toll for passenger vehicles
- > ASFINAG toll shop
- Vending machines
- > Enforcement

Fuel cards

- ➤ GO toll
- Section toll for passenger vehicles
- Enforcement

EETS Providers

➤ GO toll

CREDITS

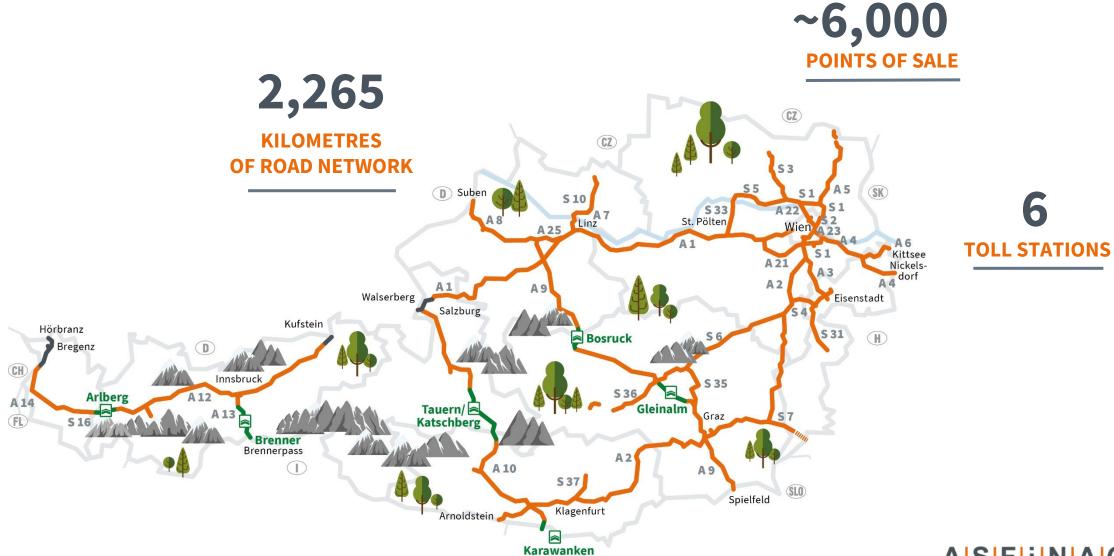
- ➤ GO toll
- Section toll for passenger vehicles
- > ASFINAG toll shop
- Vending machines
- > Enforcement

Substitute tolls

- > GO toll
 - > GO substitute tolls
 - ➤ Manual subst. tolls
- Passenger vehicle tolls
 - Section toll
 - Vignette
 - > Open toll lane



TOLL ROAD NETWORK IN AUSTRIA



TOLL PROCEEDS 2023

TOLL PROCEEDS (IN MILLION EUROS)



| | 2023 | Change | 2022 |
|---|-------|--------|-------|
| TOTAL TOLL PROCEEDS | 2,498 | +2.3 % | 2,443 |
| Total toll proceeds motor vehicles <= 3.5 tons | 812 | +6.0 % | 766 |
| Revenue from vignettes | 574 | +6.4 % | 540 |
| Section toll proceeds (Section toll segments) | 238 | +5.2 % | 226 |
| Total toll proceeds motor vehicles > 3.5 tons | 1,686 | 0.6 % | 1,677 |

PASSENGER VEHICLE TOLL – VIGNETTE

VIGNETTE RATES 2024: AN OVERVIEW FOR MOTOR VEHICLES UP TO 3.5T TPMLM

1-dayvignette only digital 10-day vignette

2-month vignette

Annual vignette



A Motorbikes

EUR 3.40

EUR 4.60

EUR 11.50

EUR 38.50



B (up to and including 3.5t technically permissible maximum laden mass)

EUR 8.60

EUR 11.50

EUR 28.90

EUR 96.40



PASSENGER VEHICLE TOLL – VIGNETTE

VIGNETTE – FIGURES 2023 FOR VEHICLES UP TO 3.5 T MPW





| Number of sold toll stickers: | 17.9 million |
|-----------------------------------|--------------------------------|
| Number of sold digital vignettes: | 10.3 million |
| Total proceeds: | € 574 million |
| System costs: | € 41 million |
| Number of points of sale: | ~6,000 (in Austria and abroad) |

PASSENGER VEHICLE TOLL – SECTION TOLL

SECTION TOLL – FIGURES 2023 FOR VEHICLES UP TO 3.5 T MPW



| Number of vehicles cleared: | 42.9 million |
|-----------------------------|--------------|
| Total proceeds: | €238 million |
| System costs: | € 21 million |

As of 2023, rounded



TOLL FOR TRUCKS

GO TOLL – FIGURES 2023 FOR VEHICLES OVER 3.5 T MPW



| Number of toll transactions: | 812 million |
|------------------------------|-----------------|
| Contracts: | 1,061,732 |
| Total proceeds: | € 1,686 million |
| System costs: | € 52 million |

As of 2023, rounded

TOLL FOR TRUCKS – RATES 2023

Costs **Infrastructure**



- Depend on number of axles
- Depend on charging structure

Mark-up

cross-funding of Brenner Base Tunnel



 25 % surcharge for Lower Inn Valley and Brenner

External costs Air



- Number of axles
- EURO emission class
- Exemption for E/H2 drive types

External costs Noise



- Number of axles
- Time (day/night rate)

2020: 44 million EUR

2021: 46 million EUR

2022: 48 million EUR

2023: 49 million EUR

BMK

(Austrian Federal Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology) **2020: 53 million EUR**

2021: 59 million EUR

2022: 56 million EUR

2023: 53 million EUR

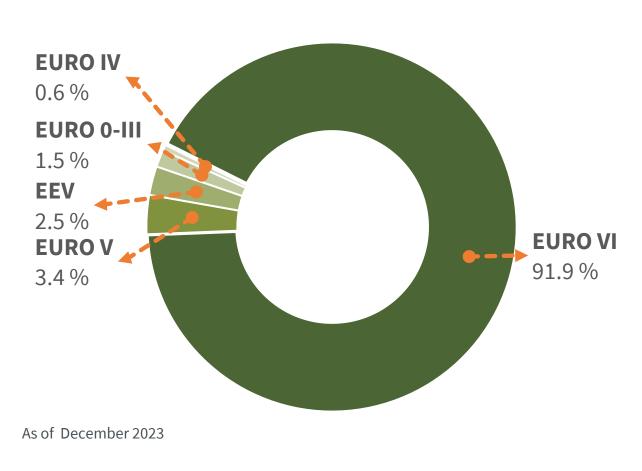
BMK

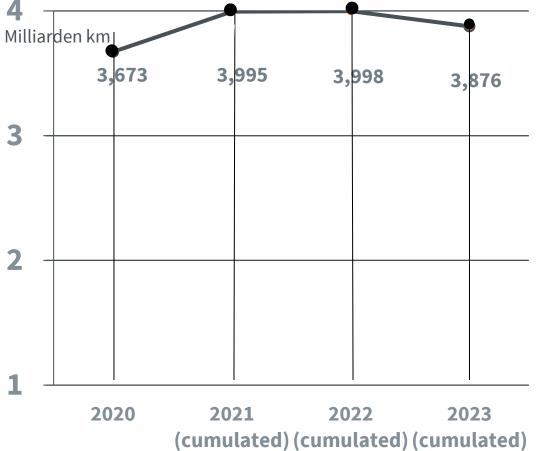
(Austrian Federal Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology)



As of 2023

EURO EMISSIONS CLASS TRUCK MILEAGE 2023 **PERCENTAGES 2023**





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CHARGES FOR CO₂ EMISSIONS | RATES SINCE 1.1.24

Mileage-based toll

for motor vehicles over 3.5 tonnes maximum technically permissible laden mass

including surcharges for air and noise pollution and CO₂ emissions

valid from 1 January 2024

| Total rates | | | | |
|----------------------------------|-------------------|-----------------------|------------------------------|---------------------------------|
| | | 2 axles Category 2 | 3 axles Category 3 | 4 and more axles Category 4+ |
| CO ₂ emission class 5 | zero emission | 0,0538 | 0,0741 | 0,1097 |
| CO ₂ emission class 4 | EURO VI | 0,2140 | 0,2987 | 0,4445 |
| CO ₂ emission class 3 | EURO VI | 0,2259 | 0,3151 | 0,4693 |
| CO ₂ emission class 2 | EURO VI | 0,2265 | 0,3160 | 0,4705 |
| CO ₂ emission class 1 | EURO VI | 0,2278 | 0,3177 | 0,4730 |
| CO ₂ emission class 1 | EEV and EURO V | 0,2408 | 0,3377 | 0,4990 |
| CO ₂ emission class 1 | EURO IV | 0,2568 | 0,3557 | 0,5250 |
| CO ₂ emission class 1 | EURO 0 to III | 0,2708 | 0,3767 | 0,5540 |

Rates in Euro per kilometer, excl. 20 % VAT

| Infrastructure costs | | | |
|---|------------------------------|------------------------------|---------------------------------|
| | 2 axles Category 2 | 3 axles Category 3 | 4 and more axles Category 4+ |
| CO ₂ emission class 5 | 0,0508 | 0,0711 | 0,1067 |
| other CO ₂ emission classes | 0,2030 | 0,2842 | 0,4263 |
| Surcharge air pollution and noise pollution | | | |
| | 2 axles Category 2 | 3 axles Category 3 | 4 and more axles Category 4+ |
| zero emission vehicles | 0,0030 | 0,0030 | 0,0030 |
| EURO VI | 0,0050 | 0,0070 | 0,0080 |
| EURO V and EEV | 0,0180 | 0,0270 | 0,0340 |
| EURO IV | 0,0340 | 0,0450 | 0,0600 |
| EURO 0 to III | 0,0480 | 0,0660 | 0,0890 |
| Surcharge CO ₂ emissions | | | |
| | 2 axles Category 2 | 3 axles Category 3 | 4 and more axles Category 4+ |
| CO ₂ emission class 5 | 0,0000 | 0,0000 | 0,0000 |
| CO ₂ emission class 4 | 0,0060 | 0,0075 | 0,0102 |
| CO ₂ emission class 3 | 0,0179 | 0,0239 | 0,0350 |
| CO ₂ emission class 2 | 0,0185 | 0,0248 | 0,0362 |
| CO ₂ emission class 1 | 0,0198 | 0,0265 | 0,0387 |





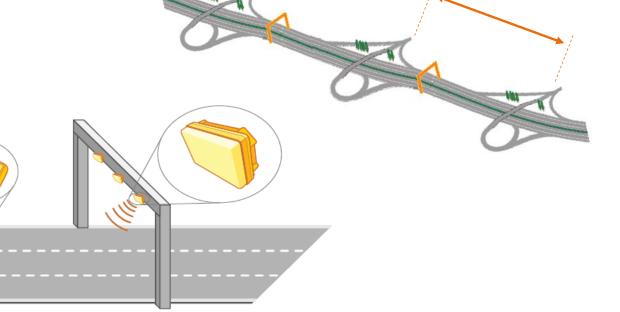
GO TOLL – AN OVERVIEW

GO

TOLL COLLECTION

♥ Toll road network is divided into individual toll sections

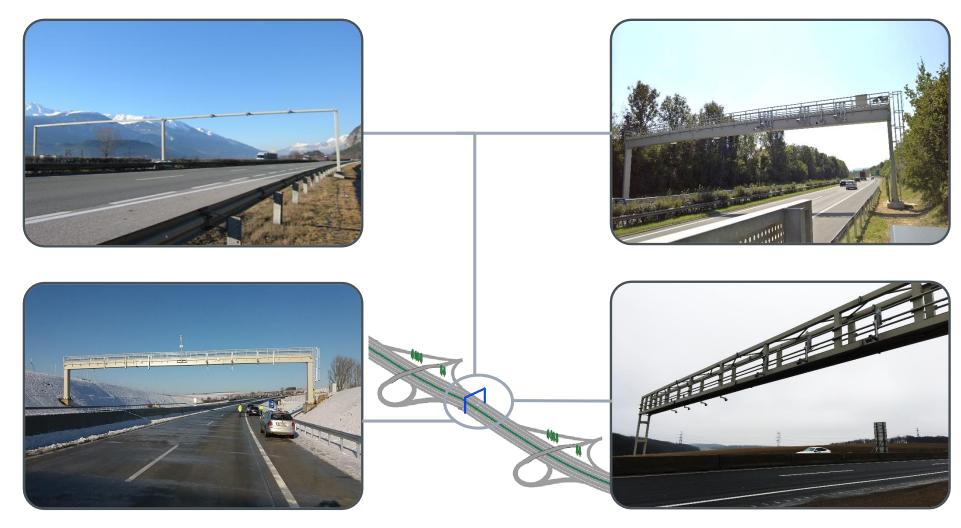
In each section there is a toll gantry with antennas



- Prerequisite for proper toll collection: OBU (GO-Box)
- ♥ When vehicles pass underneath a gantry, the OBU (GO-Box) "communicates" with microwave antennas
- Toll is collected separately for each section

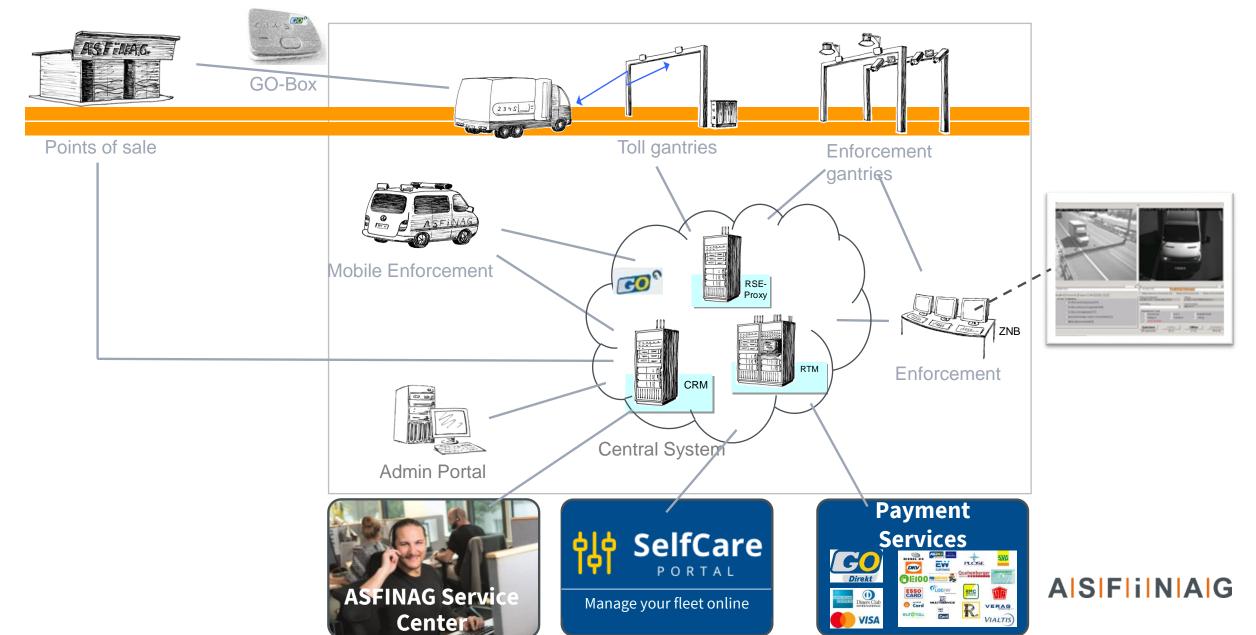


ROAD-SIDE INFRASTURCTURE – TOLL COLLECTION STATIONS



THE MAJOR COMPONENTS OF THE TOLL SYSTEM





GO-BOX (ON-BOARD-UNIT/OBU)

- ♥ 5 Euro processing fee (once per licence plate number)
- **Postpaid** or **Prepaid**
- **9** 3 categories (number of axles) can be set
- **♀ Easy self-installation** (velcro tape)



Personalized in the GO-Box:

- ♥ Licence plate number & Country of registration
- ♥Basic category
- ♥Type of contract (prepaid/postpaid)
- ♥ motor vehicle type (HGV/bus)

Stored in the central system:

- **♥**EURO emission class
- **♥**CO₂ emission class
- ♥With prepaid units: remaining credit
- ♥With postpaid units: means of payment
- **♥** Date of first registration
- ♥Vehicle subgroup
- **♥** Specific CO₂ emissions



GO TOLL – TYPES OF PAYMENT PROCEDURE







Pre-Pay Procedere (market share around 2.5 %)

- ◆ Topping up the GO-Box with toll credit (minimum EUR 75.00, maximum EUR 500.00) at the GO points-of-sale
- Payment in advance, toll credit is consumed by travelling (similar to phone cards)
- Refund of non-used toll credits available

Post-Pay procedure (market share around 97.5 %)

- Subsequent invoicing according to actually travelled toll sections via deposited means of payment
- ♥ Invoicing via
 - **♀** GO Direkt, credit cards, fuel cards, EETS providers

Credit procedure via GO Direkt

- Topping up a central account with toll values as needed
- Payment in advance, toll credit is consumed by travelling (similar to phone cards)
- Automatic recharge when credit falls below a defined value
- ♥ No stops at GO points-of-sale necessary
- Combines the convenience of the Post-Pay procedure and the cost control
 of a Pre-Pay procedure
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GO-TOLL – MEANS OF PAYMENT

Fuel cards











































Debit card



Cash



EUR and HUF (in Hungary)

Direct debiting



Credit card









EETS Providers















- 1) Only for Pre-Pay procedure
- 2) Only for Post-Pay procedure
- 3) Only for Post-Pay procedure with cards accepted according to Appendix 2 of the Tolling Regulations
- 4) Only for Post-Pay procedure, not at the GO points of sale



PASSENGER VEHICLE TOLL – MEANS OF PAYMENT

Fuel cards



















EUR

Wallets









Bank transfer and direct debit







Debit and credit cards













- 1) No subscriptions for digital toll products
- 2) Only at toll stations, not for digital toll products
- 3) Only for digital toll products, not at toll stations



ENFORCEMENT

RESPONSIBLE FOR CORRECT TOLL PAYMENT ASFINAG ENFORCEMENT CENTER (VIENNA, ZIRL)



Substitute toll revenues*

| 2023 | EUR 57.9 million |
|------|------------------|
| 2022 | EUR 52.4 million |
| 2021 | EUR 41.7 million |
| 2020 | EUR 33.5 million |
| 2019 | EUR 34.1 million |
| 2018 | EUR 31.6 million |

^{*} Sum including substitute tolls for vignette and truck toll as well as revenues according to administrative penal law

KEY FIGURES

KILOMETRIC PERFORMANCE

(Vehicles over 3,5 t MPW):

- 2023 total: 3.88 billion km
- 2022 total: 4.00 billion km
- 2021 total: 3.99 billion km
- 2020 total: 3.67 billion km
- 2019 total: 3.85 billion km



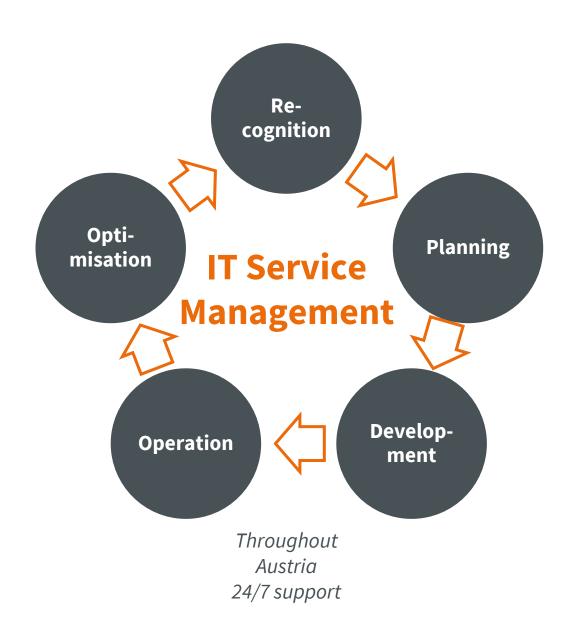
GO-BOXES*

- Existing contracts: around 1,060,800
 - Of which Post-Pay: around 827,000 (78 %)
 - Of which Pre-Pay: around 233,800 (22 %)
- Actively used: around 735,800 (69.4 %)

- TRANSACTION RATE: around 99.7 %
- **TOLL EVASION RATE:** less than 0.67 %



DEVELOPMENT AND OPERATION OF IT SERVICES



Q IT Service Management:

1st point of contact for customers

Products:

suitable, economic, secure, networked

PRODUCT RANGE

| Business Applications | Traffic | Toll |
|---|---|--|
| Customer information Analytics Documentation / internal information ERP Office IT | Road operation Traffic management Traffic surveillance | GO tollDigital vignetteSection tollToll enforcement |
| Communication & Data Services | Internal for customers Telephone system: Landline/mobile/unified | WiFi, data network,Fibre-optics, co-location |
| Basic IT infrastructure | on premise/cloud dedicated/virtualised/ as a service | Security: physical/ end devices/network |