

**ASFINAG NATIONAL REPORT
ASECAP STUDY AND INFORMATION DAYS
COSTA NAVARINO, 29-31 MAY 2019**

Network length

In 2018 the total length of the motorway and expressway network operated by ASFINAG in Austria amounted to 2,223 km. Also parts of the network are 5,769 bridges and 166 tunnels. The entire ASFINAG road network is subject to tolling.

Country: Austria	2018
Network length	2,223 km
2 x 2 lanes	1,727 km
2 x 3 lanes	322 km
2 x 4 lanes.....	29 km
others	145 km

Openings in 2019

ASFINAG is currently finishing an intensive tunnel safety programme, which also covers the construction of second tunnel tubes according to EU legislation.

Further the following motorway section will be opened in 2019:

Road	Project Description	Length	Start of construction	Opened to traffic
A5 Nord Autobahn	Reinforcing the Baltic Adriatic Corridor between Vienna and Brno; Extension of the motorway section A5 from Poysbrunn to the national border	5 km	April 2018	Autumn 2019

Investments

Total investment for 2018*):	990 Million EURO
Total investment for 2019**):	1.290 Million EURO
New constructions + expansions 2018:	390 Million EURO
New constructions + expansions 2019:	640 Million EURO
Renovation and repairs 2018:	470 Million EURO
Renovation and repairs 2019:	520 Million EURO
Other 2018:	130 Million EURO
Other 2019:	130 Million EURO
*) Values as of 3rd Forecast 2018 (actual costs not yet verified)	
**) Forecast	

Financing

ASFINAG's operational expenses are mainly covered by toll income. Funds for the refinancing of maturing financial debt are raised via the international capital markets. For that purpose, ASFINAG has set up a Medium Term Note Programme (EMTN) guaranteed by the Republic of Austria, which allows issuing bonds at favourable funding costs. In 2018 ASFINAG did not issue bonds as there were no redemptions for outstanding debt. For more detailed information please refer to our website www.asfinag.at – Investor Relations.

Traffic

In 2018, there was an increase in the number of kilometres travelled on the ASFINAG network (motorways and expressways) compared with 2017.

The total number of km travelled by all vehicles on the ASFINAG network in the year 2018 amounts to approx. 32.480 billion km. Compared to the previous year this represents an increase of +2.8%.

In line with the overall traffic volume there was also an increase in the number of km travelled by heavy goods vehicles.

Kilometres travelled on the ASFINAG network

Year	Km travelled in mill. Km/year (M+E*)			Km travelled growth in %			
	HV**	LV***	Total	Total traffic (M+E*)		HV** traffic (M+E*)	
2009	2,838	23,097	25,935	-1.6	08-09	-12.8	08-09
2010	3,027	23,431	26,458	+2.0	09-10	+6.6	09-10
2011	3,139	23,694	26,832	+1.4	10-11	+3.7	10-11
2012	3,140	24,068	27,198	+1.4	11-12	-0.3	11-12
2013	3,178	24,546	27,724	+1.9	12-13	+1.6	12-13
2014	3,268	25,708	28,976	+4.5	13-14	+2.8	13-14
2015	3,335	26,432	29,767	+2.7	14-15	+2.1	14-15
2016	3,496	27,274	30,770	+3.4	15-16	+4.8	15-16
2017	3,616	27,992	31,608	+2.7	16-17	+3.4	16-17
2018	3.816	28.664	32.480	+2.8	17-18	+5.6	17-18

* motorways + expressways

** heavy goods vehicles

*** light vehicles

Tolling system and tolling technologies used

The Austrian toll system consists of a time-related toll (toll sticker/vignette for vehicles under/equal to 3.5 tonnes and motorcycles) and a distance-related (mileage-dependent) toll for vehicles over 3.5 tonnes. The toll revenues belong to ASFINAG, which is also responsible for the toll collection. ASFINAG also operates special toll sections in Austria's alpine regions charging a distance-related toll for all vehicles which is collected at toll booths (including video toll lanes). Tolls for vehicles above 3.5 tonnes are collected electronically via a free flow multi-lane DSRC system.

For cars and motorcycles ASFINAG introduced a digital vignette (directly linked to a vehicle's licence plate which is registered in a database) by the end of 2017 in addition to the toll sticker. This product is available online <https://shop.asfinag.at/> and via the ASFINAG App as well as at selected sales offices.

The implementation of the new GO-Maut System for vehicles above 3.5 tonnes (GO-Maut 2.0) has been finalized mid-2018.

Toll rates

At the beginning of 2017 the tariff system for heavy vehicles was changed. Since that the distance-related toll includes surcharges for external costs, namely air and noise pollution.

The current toll rates (2019) for HGV can be found on www.go-maut.at:

Rates 2019						
Distance-related toll including surcharges for air and noise pollution for motor vehicles with a maximum permissible weight of over 3.5 tonnes						
	Category 2 2 axles		Category 3 3 axles		Category 4+ 4 axles and more	
Rate groups	Day	Night**	Day	Night**	Day	Night**
Drive type E/H2*	0,1855 0	0,1859 0	0,2603 3	0,2612 5	0,3901 1	0,3912 7
EURO-emission class EURO VI	0,1882 0	0,1886 0	0,2641 1	0,2650 3	0,3944 3	0,3955 9
EURO-emission class EURO V and EEV	0,2024 0	0,2028 0	0,2839 9	0,2849 1	0,4187 5	0,4199 1
EURO-emission class EURO IV	0,2087 0	0,2091 0	0,2928 1	0,2937 3	0,4288 3	0,4299 9
EURO-emission class EURO 0 to III	0,2287 0	0,2291 0	0,3208 1	0,3217 3	0,4608 3	0,4619 9
Rates in EUR per km, excl. 20% VAT, valid as 1st of January 2019						

* Drive type E/H2 covers purely electric drives and hydrogen fuel cell drives.

** The night rates apply between 10 p.m. and 5 a.m

As every year on the 1st December 2018 toll rates were adjusted for vehicles under and equal to 3.5 tonnes (annual consumer price index increase):

Rates valid as of December 1st 2018 (toll stickers):

	10-day toll sticker	2-month toll sticker	Annual toll sticker
Motorbike	5.30	13.40	35.50
Car (vehicle up to and including 3.5 tonnes-maximum permissible weight)	9.20	26.80	89.20

Revenues

	2017	2018*)	Deviation
Distance related toll (vehicles > 3.5 tonnes)	1,370	1,468	+7,1%
Toll sticker revenues (vehicles ≤ 3.5 tonnes)	492	502	+2%
Revenues from special toll sections	168	193	+13%
Total toll revenues	2,030	2,163	+6,1%

*) Values as of 3rd Forecast 2018

Safety

	Definition and method of calculation	Rate	Variation in % 2017/2018
Personal injury rate	Number of personal injuries per million kilometers driven	figures for 2018 are not yet available 2017: 0,074	
Fatal accident rate	Number of fatal accidents per million kilometers driven	0.001	-33%
Rate of dead	Number of fatalities per million kilometers driven	0.001	-43%

In 2018, 33 people were killed on Austrian motorways and expressways. This poses a decrease compared to 2017 (-43,1%). Thus, ASFINAG's roads are among the safest roads in Europe.

Long-term forecasts and tendencies

ASFINAG's Vision 2020

ASFINAG is one of Europe's leading motorway network operators with a special focus on

- Availability
- Traffic management
- Traffic Information
- Road safety and
- Technological innovations

We act internationally and interlink with public transport.

Currently ASFINAG is working on its Vision and Strategy 2025+.

Significant achievements in 2018 and actions already started (and/or to be achieved in 2019) and foreseen for 2019.

Next generation of the GO-Maut system

The implementation of the new GO-Maut System for vehicles above 3.5 tonnes (GO-Maut 2.0) has been finalized mid-2018. The system with the 2 suppliers Kapsch Traffic Com (for the Road Side Equipment) and T-Systems Austria (for the Central System) is running very well.

Digital Vignette

ASFINAG has introduced the Digital Vignette by the end of 2017. The Digital Vignette is an additional product to the Toll Sticker for vehicles below and equal to 3.5 tonnes. The customer can choose if they prefer the Digital Vignette by registering his licence plate online or the physical Toll Sticker, which needs to be attached on the windscreen of the vehicle.

Until end of February 2019 ASFINAG sold over 2 million digital vignettes, which represents an increase of over 50% compared to 2018. Moreover, over 50% of the annual car vignettes sold were digital vignettes.

Safety

Making Austria's motorways amongst the safest in Europe in 2018 get reality. The number of fatalities is the lowest in our history. We are fully encouraged to continue our efforts to build a Safe System on our roads.

ASFINAG Corporate Social Responsibility – We are prime!

Investors around the world are showing more and more interest in sustainable companies. When trying to find companies with a good corporate social responsibility these investors are making use of the rating agency ISS oekom research. ISS oekom research is a well-respected European rating company and rates over 6,000 companies per year. Just leading companies in an industry receive prime status, for example in 2018 only 500 companies were awarded with the prime status.

ASFINAG is a future-oriented and sustainable company and we are very proud to announce that we were awarded with the prime status certificate by ISS oekom at the beginning of January. This accomplishment is even more remarkable because it is very difficult for a motorway operator to meet the strict sustainability criteria of ISS oekom.

Moreover, we are very proud that sustainability is increasingly developing into a corporate philosophy.

Our goal is straightforward: We belong to the top of Europe and we definitely want to stay there.

ASFINAG Project: E-Mobility

The goal of providing a network coverage by a sufficient number of e-charging stations for electric vehicles throughout the Austrian motor- and expressway network by the end of 2018 has been achieved. By December 2018, e-chargers were in operation at 26 service stations, so that at least every 100 kilometres along the motorways and expressways, the necessary infrastructure for electric vehicles is available. ASFINAG itself invested about three million euros in 2018 for this purpose. Other primary objectives in this network coverage were simple handling of the loading processes, fast charging options and the fact that all types of vehicles on the market and several common payment options are also offered. With charging power of 50, 150 and partly 350 kW, cars can be largely recharged in less than 30 minutes.

But of course, the expansion continues, in 2019 an additional five locations are planned. In the long term, every service station should be equipped with e-charging stations.

Customer Service and Customer Satisfaction

Customer Service is key to the relationship between road users and road administrations. To best fulfil this task for the entire organisation, the ASFINAG Service Centre has implemented a strategic thrust towards digital customer service. The aim is to provide customers with relevant information and service via their preferred channel, e.g. chat, automation / self-service / artificial intelligence (chatbot) together with individual face-to-face communication during events and meetings (customer care). The ongoing challenge in this regard is the orchestration of multiple channels, to provide a continuous customer service journey.

A deeper understanding of the needs and demands of an individual road user is the prerequisite to provide them with relevant information, tailor-made service and customised solutions. To this end, ASFINAG has implemented a Customer Satisfaction Program, which provides the organisation with strategic indicators, such as a customer satisfaction index and a number of performance indicators for various strategic areas (traffic information, road safety, availability, tolling ...). At the same time, the program generates knowledge on the customer's view for employees (e.g. via training and customer segmentation projects) thus enabling them to adapt a more customer-centric approach. The program holds a methodical toolkit that ranges from classical surveys to service design and co-creation processes – means by which customers become active participants in innovation processes.

The periodic ASECAP marketing workshop provides a perfect opportunity to go through and discuss individual aspects of customer service and customer satisfaction. In 2018, the topic covered by the ASFINAG representative was the “Digital Customer Journey 2.0” by the example of the newly implemented Digital Vignette. ASECAP consists of an efficiently functioning network of experts, which helps to benchmark, exchange best practices and mutual learning – in multilateral working groups and also in direct bilateral exchange.

C-ITS rollout in Austria

The rollout of C-ITS, „Cooperative Intelligent Transport Systems”, on the basis of WiFi technology (ITS-G5) has started in Austria. Safety relevant data can soon be transferred between vehicles and the road infrastructure so that traffic incidents, road works and other warning messages can be received inside the vehicle, where future assistance systems can react to these warnings.

The pilot installations of C-ITS have been tested successfully in the last years. The first use cases (“Day 1 applications”) have been developed in national and international initiatives and have already been tested in a pilot area of 24 C-ITS road side units in the area around Vienna. Tests across borders were carried out in 2018 with vehicles from France, Portugal and Austria.

The next generation of C-ITS use cases (“Day 2 applications) that aim at supporting automated driving were also specified and published in 2018. They contain specific information for automated vehicles, the exchange of sensor information between vehicles and infrastructure, and improvements in the position detection for vehicles.

The call for tender for the WiFi-based C-ITS rollout on the entire Austrian motorway network was published in December 2018. This call includes both Day 1 and Day 2 applications. For the first part of the rollout that is planned to start in 2019, approx. 150 locally installed C-ITS road side units are planned to be used, focussing on the motorways around Vienna and along the corridor Vienna – Salzburg up to the German border.

The total rollout is planned for more than 500 locally installed C-ITS road side units on the entire Austrian motorway network, and it is completed with a further call for tender concerning mobile warning trailers with WiFi based C-ITS equipment. C-ITS is expected to further improve road safety and traffic efficiency. Especially road work and incident warnings transferred by the infrastructure or by mobile warning trailers can trigger warnings in the vehicle or automatic braking and thereby prevent accidents and protect the road workers.

MAIN ASECAP KEY FIGURES

Country: Austria	Indicate below how you calculate each figure provided in the “2018” column	2018 Figure
Network length (Km)..... 2 x 2 lanes (Km)..... 2 x 3 lanes (Km)..... 2 x 4 lanes (Km)..... other	Number according to list	2,223 km 1,727 km 322 km 29 km 145 km
Number of km in construction	Number according to list	44,4 km
Forecasts of opening motorways section in 2019	Number according to list	4,9 km
Annual toll revenues (in millions of Euros, excl. VAT)	Number according to list	2.163*
VAT % (Indicate the VAT % percentage to the toll revenues)		20%
Permanent staff		2,822
Average daily traffic (light vehicles)	Number according to distribution system	35,559
Average daily traffic (heavy vehicles)	Number according to distribution system	4,641
Average daily traffic (total = light + heavy vehicles)	Number according to distribution system	40,200
Total number of accidents		n.a.
Number of personal injury accidents		n.a.

Number of dead	Number according to list	33
Fatality rate	Number of fatalities per million kilometers driven	0.001
Kilometres travelled (10 ⁶ x km)	Number according to list	32,481
Number of toll transactions (Total):	Analysis of the toll system and the sellers of the special toll section	731,510,000
Number of toll transactions (light vehicles):		37,600,000
Number of toll transactions (heavy vehicles):		693,910,000
Number of toll stations	Number according to list	6
Number of toll lanes	Number according to list	116
Number of ETC lanes	Number according to list	25
Number of ETC subscribers (Total):	Number according to distribution system	1,377,104
Number of ETC subscribers (light vehicles):		395,804
Number of ETC subscribers (heavy vehicles):		981,300
Number of service areas (equipped with petrol stations)	Number according to list	87
Number of rest areas	Number according to list	259
Number of restaurants	Number according to list	55
Number of hotels	Number according to list	19

* Value as of 3rd Forecast 2018