



# The Global GNSS-Based Road Pricing Market

1st Edition

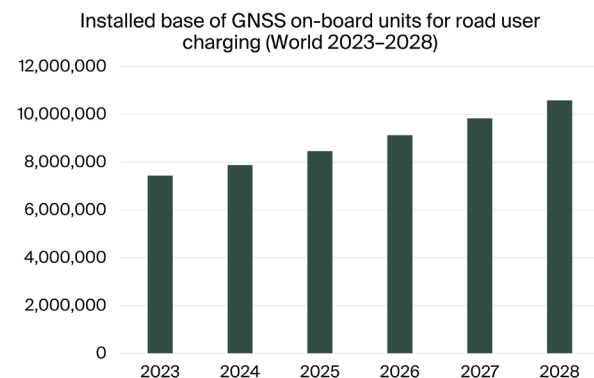
*The Global GNSS-Based Road Pricing Market is a comprehensive report from Berg Insight analysing the latest developments on the market for electronic toll collection and road user charging based on global navigation satellite systems (GNSS). This strategic research report from Berg Insight provides you with 80 pages of unique business intelligence including 5-year industry forecasts and expert commentary on which to base your business decisions.*

# The global installed base of GNSS-based on-board units deployed for road user charging exceeds 7 million units

GNSS-based road pricing refers to the charging of road users using global navigation satellite system (GNSS) sensors inside vehicles. The road pricing umbrella term typically covers various types of schemes such as electronic toll collection (ETC) and road user charging (RUC) as well as vignettes and congestion charging. More than a dozen countries around the world have GNSS-based RUC/ETC systems that are in operation or about to be launched in the near-term. The vast majority of these are so far located in Europe but there are also programs in operation in North America and Asia-Pacific as well. Berg Insight estimates that the installed base of GNSS-based on-board units deployed for road user charging reached more than 7.4 million units worldwide in 2023. Growing at a compound annual growth rate (CAGR) of 7.3 percent, the installed base is forecasted to reach almost 10.6 million units in 2028.

Berg Insight ranks Russia, Germany and Poland as the largest markets in terms of the number of GNSS-equipped vehicles for road user charging purposes. The Russian implementation is the largest in the world with more than 1 million on-board units in use for the Platon ETC system. Germany and Poland are the runners-up with the Lkw-Maut and e-TOLL systems respectively. Other countries with more than half a million on-board units in use include Belgium with the Kilometer Charge, Hungary's HU-GO and the Czech Republic with the CzechToll satellite toll system. Bulgaria and Slovakia also have several hundred thousand on-board units deployed. The remaining top-10 markets are New Zealand and Switzerland with the eRUC and LSVA implementations respectively. The fragmented US market has a few operational RUC programs on state level and the country is just outside of the global top-10 so far.

The road pricing space is affected by various market drivers and industry trends that will shape the sector in the years to come. The European Electronic Toll Service (EETS) is driving interoperability in the major European market and there is a trend towards GNSS at the expense of other technologies from a global perspective. There is moreover an emerging shift from traditional windshield OBUs to also including other hardware form factors in road user charging implementations for various vehicle types. The growing popularity of electric vehicles (EVs) and associated fuel tax losses are moreover favouring distance-based RUC overall. Various value-added service offerings are furthermore facilitated as electronic tolling is converging with vehicle telematics.



## Highlights from the report

**Introduction** to global navigation satellite systems (GNSS) and road pricing.

**Insights** from numerous interviews with toll system operators and service providers.

**Comprehensive overview** of operational GNSS-based road pricing schemes in 11 countries as well as numerous planned and potential developments in other markets.

**Profiles** of 10 key companies active in the GNSS-based road user charging value chain.

**In-depth analysis** of market trends and key developments.

**Market forecasts** lasting until 2028.



# Table of contents

## Executive Summary

### 1 Introduction to GNSS and Road Pricing

- 1.1 Introduction to Global Navigation Satellite Systems
  - 1.1.1 GPS, GLONASS, Galileo and BDS
  - 1.1.2 SBAS
- 1.2 Introduction to road pricing
  - 1.2.1 Electronic Toll Collection and Road User Charging
  - 1.2.2 Vignettes and e-vignettes
  - 1.2.3 Congestion charging
- 1.3 GNSS-based road pricing
- 1.4 Alternative and complementary technologies and infrastructure
  - 1.4.1 DSRC and ANPR
- 1.5 European Electronic Toll Service
- 1.6 Scope and delimitations

### 2 GNSS-Based Road Pricing Schemes

- 2.1 Europe
  - 2.1.1 Belgium
  - 2.1.2 Bulgaria
  - 2.1.3 Czech Republic
  - 2.1.4 Germany

- 2.1.5 Hungary
- 2.1.6 Poland
- 2.1.7 Slovakia
- 2.1.8 Switzerland
- 2.1.9 Other countries
- 2.2 Rest of World
  - 2.2.1 New Zealand
  - 2.2.2 Russia
  - 2.2.3 United States
  - 2.2.4 Other countries

### 3 Market Forecasts and Conclusions

- 3.1 Market analysis
  - 3.1.1 Major countries for GNSS-based road user charging
  - 3.1.2 Market forecasts for GNSS-based road user charging
    - 3.1.3 Regional market characteristics
- 3.2 Market drivers and trends
  - 3.2.1 EETS drives interoperability across Europe
  - 3.2.2 The tolling technology landscape is trending towards GNSS
  - 3.2.3 Form factor developments in the RUC/ETC space
  - 3.2.4 Electric vehicles and declining fuel tax revenues favour distance-based RUC
  - 3.2.5 Convergence of vehicle telematics and electronic tolling facilitates VAS

### 4 Company Profiles and Strategies

- 4.1 Axxès
- 4.2 Continental
- 4.3 Emovis
- 4.4 EROAD
- 4.5 Eurowag
- 4.6 ITIS Holding
- 4.7 Kapsch
- 4.8 Telepass
- 4.9 Toll4Europe
- 4.10 TotalEnergies

### Glossary

## This report answers the following questions

- What different types of players are involved in the road user charging value chain?
- What regional differences are there between markets?
- How is the European Electronic Toll Service (EETS) impacting the market?
- What technologies are used for electronic toll collection and road user charging?
- Is the growing popularity of electric vehicles affecting the road user charging space?
- Which other trends and drivers are shaping the market?
- How will the GNSS-based road pricing market evolve in the future?



## About Berg Insight's IoT market research

Our market reports offer comprehensive information and analysis on key IoT technologies and markets, addressing important concerns including total addressable market, market penetration, market shares, industry landscape, regulatory environment, market trends and forecasts. Our research portfolio today comprises more than 70 items, where each market report focuses on a specific vertical application area or cover horizontal themes. All market reports come with complementary data sets in Excel format that can be easily analysed and converted into tables and charts. We offer a range of different license options together with bundled packages and subscriptions to suit your specific needs.

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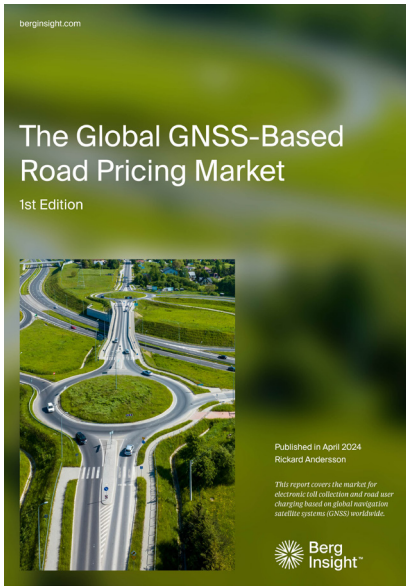
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## Who should read this report?

The Global GNSS-Based Road Pricing Market is the foremost source of information about the market for electronic toll collection and road user charging based on global navigation satellite systems (GNSS). Whether you are a toll system operator, technology supplier, service provider, telematics vendor, telecom operator, investor, consultant, or government agency, you will gain valuable insights from our in-depth research.

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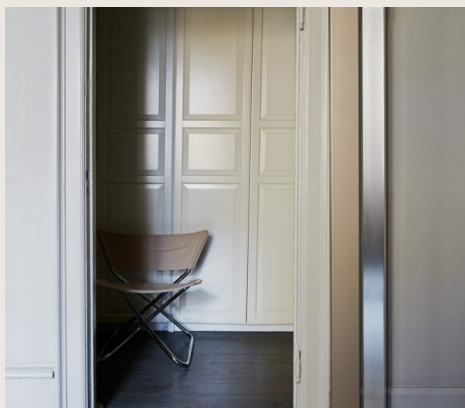


Rickard is a principal analyst with more than 10 years' experience in market research and advisory in the commercial telematics industry. His key areas of expertise include on-road and off-road fleet telematics including video telematics. Rickard has published research on various telematics topics including fleet management and asset management systems for diverse vehicle and asset types ranging from heavy trucks and light commercial vehicles to construction machinery and airport ground support equipment. Rickard joined Berg Insight in 2010 and holds a Master's degree in Industrial Engineering and Management from Chalmers University of Technology.

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