+44 20 8123 2220
info@marketpublishers.com

Electronic Toll Collection (ETC) Systems: Market Research Report

https://marketpublishers.com/r/E2B2378E72CEN.html
Date: December 2018
Pages: 223
Price: US$ 5,600.00 (Single User License)
ID: E2B2378E72CEN

Abstracts

This report analyzes the worldwide markets for Electronic Toll Collection (ETC) Systems in US$ Million. The report provides separate comprehensive analytics for the US, Canada, Japan, Europe, China, South Korea and Rest of World.

Annual estimates and forecasts are provided for the period 2016 through 2024.

Market data and analytics are derived from primary and secondary research. Company profiles are primarily based on public domain information including company URLs.

The report profiles 62 companies including many key and niche players such as -

Abertis

Atlantia S.p.A

Conduent, Inc.

Cubic Corporation

DENSO CORPORATION

EFKON AG

+44 20 8123 2220
info@marketpublishers.com

Contents

1. INTRODUCTION, METHODOLOGY & PRODUCT DEFINITIONS

Study Reliability and Reporting Limitations
Data Interpretation & Reporting Level
Quantitative Techniques & Analytics
Product Definitions and Scope of Study

2. MARKET OVERVIEW

Road User Charging: The Only Sustainable Way to Fund Road Infrastructure Development
Growing Investments in Construction of Roads and Highways Augurs Well for ETC Systems Market

Table 1. Growing Infrastructure Needs Drive Opportunities for ETC as Governments Focus on Bridging the Investment Gap through Tolling: Worldwide Cumulative Infrastructure Spending on Roads in US$ Billion by Region for the Period 2016-2040 (includes corresponding Graph/Chart)

Road User Charging/Tolling Emerges as a Dual Edged Sword for Revenue Generation & Congestion Management

Table 2. Rising Economic Cost of Excess Travel/Transit Delays Strengthens the Business Case for Tolling to Manage Vehicular Congestion: Average Time Spent in Traffic Congestion (in Hours) in Select Cities and Countries Worldwide (includes corresponding Graph/Chart)

Table 3. Decision of Mature Metropolises to Reduce Vehicle Traffic Bodes Well for Congestion Tolling: Motor Vehicles Per 1000 People in Select Countries Worldwide for the Year 2017 (includes corresponding Graph/Chart)

ETC Emerges as a Key Enabling Technology for Tolling
Need to Avoid Lengthy Waiting Lines & Environmental Pollution at Toll Plazas to Drive Demand for ETC Systems
Global Market Outlook

+44 20 8123 2220
info@marketpublishers.com

Asia-Pacific and Other Developing Countries to Drive Future Market Growth
Notable Trends, Growth Drivers & Issues
Lessening the Challenge of Interoperability Stands Out as a Key Driver of Growth
ETC Systems, as a Vital Cog in the ITS Wheel, to Benefit from the Growing Investments in ITS

Table 4. Growing Investments in Intelligent Transportation Systems (ITS) to Catalyze the Deployment of ETC Systems for Smart Infrastructure Funding & Intelligent Traffic Control: Global Revenues of ITS Market in US$ Million by Geographic Region for the Years 2018 and 2024 (includes corresponding Graph/Chart)

Payment Innovations Heighten the Attractiveness of ETC Deployments

Table 5. Strong Penetration of Internet, Smartphones and Mobile Broadband in Developing Countries Spurs Opportunities for Internet-Based Electronic Toll Collection Systems: Global Smartphone Penetration Rate (%) and Mobile Internet Subscriptions (In Million) in Developed and Developing Countries for the Year 2017 (includes corresponding Graph/Chart)

Table 6. Global Shipments of Smartphones and Number of Internet Users in Billion for the Years 2018 and 2022 (includes corresponding Graph/Chart)

ETC Systems Assist in Effective Traffic Management
RFID: One of the Most Popular ETC Technologies

Table 7. RFID-Based ETC Systems Remain a Popular Choice as Evidenced by the Strong Preference for RFID Technology in Transportation Applications: Breakdown of Transportation Application in the Global RFID Technology Market (In US$ Million) for the Years 2017 & 2020 (includes corresponding Graph/Chart)

DSRC (Dedicated Short Range Communications), as a Superior Technology to RFID, Gains in Prominence
As Satellite Technologies Emerge to the Forefront, New Generation, Multi-Constellation GNSS Hogs the Technology Limelight

+44 20 8123 2220
info@marketpublishers.com

Table 8. Growing Prowess & Maturity of GNSS as Evidenced by the Growing Value of its Technology Market Bodes Well for the Development of GNSS-Based ETC Systems: Global GNSS Market Revenues in US$ Million by Geographic Region for the Years 2017 and 2022P (includes corresponding Graph/Chart)

Video Tolling (ANPR): A Mature Technology
Smart Cards in Demand for ETC Systems
Innovation & Market Differentiation – Key Determinants for Success of ETC Projects
Major Challenges to Growth: A Synopsized Review

3. PRODUCT OVERVIEW

Toll Roads
History of Toll Roads
Varying Forms of Toll Operations
Toll Collection
Manual Toll Collection
Automatic Toll Collection
Electronic Toll Collection
Electronic Toll Collection – A Prelude
ETC System Components
Major Enabling ETC Technologies
Automatic Vehicle Identification (AVI) Systems
AVI Technologies
RFID – The Basic Technology for AVI
Types of RFID Tags
Active RFID Tags
Passive RFID Tags
Automatic Identification of Vehicles by Plate Reading
License Plate Recognition (LPR)
Structure of the LPR System
Optical License Plate Recognition
Plate Region Extraction
Segmentation
Character Recognition
Dedicated Short Range Communication based ETC Systems
Global Navigation Satellite System (GNSS)
A Comparison of DSRC and GPS based ETC Systems

+44 20 8123 2220
info@marketpublishers.com

GSM

Classification Based on Lanes
Single-Lane ETC Systems
Open Road Tolling/ Multi-Lane Free Flow ETC Systems
ETC System – OBU Classification
Read-only Systems
Read/write Systems
ETC Toll Collection Process
Fixing of Toll Rate
Means of Toll Collection
Postpaid Account
Prepaid Account
Violation Enforcement
Accounting and Management
Interoperability
Various Types of Interoperability
Transponder-level Interoperability
Peer-to-Peer Interoperability
Consolidated Operations
ETC – Implementation and Functional Challenges
Costs Associated with ETC Implementation and Operation
Cost to Tolling Agency
Cost to the Customer
Preliminary Sunk Costs
Key Benefits of ETC Systems
Advantages of Electronic Toll Collection at a Glance
For Users
For Toll Operators
Common Advantages
Major Drawbacks
ORT – Key Operational Issues

4. COMPETITIVE LANDSCAPE

4.1 Focus on Select Global Players
Abertis (Spain)
Sanef (France)
Atlantia S. p. A (Italy)

+44 20 8123 2220
info@marketpublishers.com

Conduent, Inc. (USA)
Cubic Corporation (USA)
DENSO CORPORATION (Japan)
EFKON AG (Austria)
Far Eastern Electronic Toll Collection Co., Ltd. (FETC) (Taiwan)
G. E. A. (France)
GeoToll (USA)
International Road Dynamics, Inc. (Canada)
Kapsch TrafficCom AG (Austria)
Neology, Inc. (USA)
Perceptics LLC (USA)
Q-Free ASA (Norway)
Raytheon Company (USA)
Siemens AG (Germany)
Star Systems International Limited (Hong Kong)
Thales Group (France)
The Revenue Markets, Inc. (TRMI) (USA)
Toll Collect GmbH (Germany)
TransCore Holdings, Inc. (USA)
4.2 Recent Industry Activity
Kapsch TrafficCom and OMV Partner for Standardizes EETS for Trucks
EFKON to Continue Offering Sales and Service Support for SmartTAG
ETC Bags SRTA’s Roadside Toll Collection System Contract
Kapsch TrafficCom Delivers GO Toll Collection System
EFKON to Provide New Toll Collection Solutions for Oslo and Bergen
TIBA Selects TransCore for Modernizing Toll Collection System for Bridge at US-Canada Border
TRMI Bags Contract to Upgrade B&M Bridge’s Toll Collection System
Kapsch TrafficCom Wins Contract for Upgrading Roadside Tolling Equipment
SSI Unveils Titan Multi-Protocol Tolling Reader
Conduent Announces Modernization of Tolling System on ExpressLanes
RMTA Selects TransCore for Upgrade of Toll Collection Systems in Richmond
SIECP Chooses Thales for Upgrading Toll Collection System on San Martín Texmelucan
Kapsch TrafficCom Wins Contract for Bulgaria’s Nationwide Tolling System
SSI Release AVIOR Narrow Beam Tolling Antenna
Xerox Concludes Separation of Conduent
Wi-LAN Changes Corporate Name to Quarterhill
Neology Acquires Tolling & License Plate Recognition Business from 3M

+44 20 8123 2220
info@marketpublishers.com

Atlantia Sells Minority Stake in Autostrade per l'Italia
Abertis to Acquire 5.1 % Stake in Holding d'Infraestructures de Transport (HIT)
TransCore to Deploy Toll Collection System along the Dulles Toll Road
TransCore to Deploy Express Lane Toll Project of the Commonwealth of Virginia
The RTA of Dubai Extended Contract with TransCore
BTC Awards ITS & ETC Systems Supply Contract to SICE
Czech Republic Introduces New Truck Toll Tender
Kapsch Receives Contract to Install Statewide Truck-tolling System in Rhode Island
Government of Indonesia to Establish ETC Consortium
San Miguel Partners with PNCC to Build Toll Roads
Toll4Europe GmbH Commences Operations
Axxès Collaborates with Kapsch TrafficCom to Develop Electronic Tolling Systems
Kapsch TraffcCom AG Bags Contract from ASFINAG for Modernizing Austrian GO Toll Collection System
Q-Free Signs Slovenia Truck Tolling System Contract
Q-Free Bags 3-Year Agreement for Delivery of Tags to Via Verde
TransCore Gets 10 Year Extension of its Contract with the Maine Turnpike Authority
TransCore Gets 5 Year Extension of Contract with Ohio Turnpike and Infrastructure Commission
Bip&Drive and Bip&Go Introduce First Single Teletoll System for Toll Roads in France and Spain
Kapsch TrafficCom Bags New Contract from State of Queensland for Toowoomba Second Range Crossing
Q-Free Gets Extension for its Contract with Miami Dade Expressway
Kapsch TrafficCom Bags New Tolling Contract for Replacing Existing Road Tolling Systems for Sydney Harbour Bridge and Tunnel
Q-Free Gets Extension of its Toll Collection Operations Contract with Norwegian Public Roads Administration
Q-Free Bags New Contract from TransCore
Gentex and TransCore Enter into Agreement to Provide Vehicle-Integrated Nationwide Tolling Solution to Auto Manufacturers

5. GLOBAL MARKET PERSPECTIVE

Table 9. World Recent Past, Current & Future Analysis for Electronic Toll Collection (ETC) Systems by Geographic Region - US, Canada, Japan, Europe, China, South Korea and Rest of World Markets Independently Analyzed with Annual Revenues in US$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

+44 20 8123 2220
info@marketpublishers.com

Table 10. World 9-Year Perspective for Electronic Toll Collection (ETC) Systems by Geographic Region - Percentage Breakdown of Revenues for US, Canada, Japan, Europe, China, South Korea and Rest of World Markets for Years 2016, 2018 and 2024 (includes corresponding Graph/Chart)

6. REGIONAL MARKET PERSPECTIVE

6.1 The United States
A. Market Analysis
Outlook
Electronic Toll Collection in the US: A Primer
Tolling As a Strategy to Fund Transport Infrastructure Spending to Benefit the ETC Market
Expansion of Tolling on Federally Funded Roadways
A Review of Electronic Toll Schemes in the Country
E-ZPass
PrePass Plus in Ohio
GeauxPass in Louisiana
Palmetto Pass in South Carolina
Pikepass in Oklahoma
MnPass in Minnesota
Nexpress Toll in Michigan
Freedom Pass in Alabama
I-Pass in Illinois
SunPass in Florida
K-Tag in Kansas
Good to Go in Washington
FasTrak in California
TxTAG in Texas
Peach Pass in Atlanta
NC Quick Pass in North Carolina
ETC Interoperability: A Key Area of Focus
Select Interoperable ETC Tags
Alliance for Toll Interoperability (ATI): Established to Chase Interoperability Goals
B. Market Analytics

Table 11. US Recent Past, Current & Future Analysis for Electronic Toll Collection (ETC) Systems Market Analyzed with Annual Revenues in US$ Million for the Years

+44 20 8123 2220
info@marketpublishers.com

2016 through 2024 (includes corresponding Graph/Chart)

6.2 Canada
Market Analysis

Table 12. Canadian Recent Past, Current & Future Analysis for Electronic Toll Collection (ETC) Systems Market Analyzed with Annual Revenues in US$ Million for the Years 2016 through 2024 (includes corresponding Graph/Chart)

6.3 Japan
Market Analysis

Table 13. Japanese Recent Past, Current & Future Analysis for Electronic Toll Collection (ETC) Systems Market Analyzed with Annual Revenues in US$ Million for the Years 2016 through 2024 (includes corresponding Graph/Chart)

6.4 Europe
A. Market Analysis
Outlook
European Governments Focus on Road User Charging Systems
Tolling: A Key Source of Additional Finances for Governments in Europe
EETS 2004/52/EC – A Key ETC Interoperability Directive
Statistical Findings

Table 14. Number of ETC Lanes and ETC Subscribers in Europe by Country as of December 2017 (includes corresponding Graph/Chart)

Table 15. Toll Revenues in € Million in Europe by Country As of December 2017 (includes corresponding Graph/Chart)

Table 16. Length of Tolled Road Network in Kilometers by Country for the Years 2007, 2012 and 2017 (includes corresponding Graph/Chart)

B. Market Analytics

+44 20 8123 2220
info@marketpublishers.com

Table 17. European Recent Past, Current & Future Analysis for Electronic Toll Collection (ETC) Systems by Geographic Region - France, Italy, Spain, Austria, Portugal, and Rest of Europe Markets Independently Analyzed with Annual Revenues in US$ Million for Years 2016 through 2024 (includes corresponding Graph/Chart)

Table 18. European 9-Year Perspective for Electronic Toll Collection (ETC) Systems by Geographic Region - Percentage Breakdown of Revenues for France, Italy, Spain, Austria, Portugal, and Rest of Europe Markets for Years 2016, 2018 and 2024 (includes corresponding Graph/Chart)

6.4.1 France
A. Market Analysis
Outlook
ETC Systems Installed in France
B. Market Analytics

Table 19. French Recent Past, Current & Future Analysis for Electronic Toll Collection (ETC) Systems Market Analyzed with Annual Revenues in US$ Million for the Years 2016 through 2024 (includes corresponding Graph/Chart)

6.4.2 Italy
A. Market Analysis
Outlook
ETC Systems in Italy
Viacard and TelePass
B. Market Analytics

Table 20. Italian Recent Past, Current & Future Analysis for Electronic Toll Collection (ETC) Systems Market Analyzed with Annual Revenues in US$ Million for the Years 2016 through 2024 (includes corresponding Graph/Chart)

6.4.3 Spain
A. Market Analysis
Outlook
ETC Systems in Spain
VIA-T box
B. Market Analytics

+44 20 8123 2220
info@marketpublishers.com

Table 21. Spanish Recent Past, Current & Future Analysis for Electronic Toll Collection (ETC) Systems Market Analyzed with Annual Revenues in US$ Million for the Years 2016 through 2024 (includes corresponding Graph/Chart)

6.4.4 Austria
A. Market Analysis
Outlook
ETC Systems in Austria
Go-Box
GO Maut 2.
Videomaut
Video Toll Card
B. Market Analytics

Table 22. Austrian Recent Past, Current & Future Analysis for Electronic Toll Collection (ETC) Systems Market Analyzed with Annual Revenues in US$ Million for the Years 2016 through 2024 (includes corresponding Graph/Chart)

6.4.5 Portugal
A. Market Analysis
Outlook
ETC Systems in Portugal
Via Verde
B. Market Analytics

Table 23. Portuguese Recent Past, Current & Future Analysis for Electronic Toll Collection (ETC) Systems Market Analyzed with Annual Revenues in US$ Million for the Years 2016 through 2024 (includes corresponding Graph/Chart)

6.4.6 Rest of Europe
A. Market Analysis
Outlook
Focus on Select European Markets
The United Kingdom
Electronic Toll Collection – Major Installations

+44 20 8123 2220
info@marketpublishers.com

M6 Toll Tag
Dart Charge
Fast Tag
Severn TAG
Ireland
eToll
eFlow
Germany
Germany to Charge Toll for Passenger Cars
Germany ETC Program for Commercial Vehicles
Norway
AutoPASS
B. Market Analytics

Table 24. Rest of European Recent Past, Current & Future Analysis for Electronic Toll Collection (ETC) Systems Market Analyzed with Annual Revenues in US$ Million for the Years 2016 through 2024 (includes corresponding Graph/Chart)

6.5 China
Market Analysis

Table 25. Chinese Recent Past, Current & Future Analysis for Electronic Toll Collection (ETC) Systems Market Analyzed with Annual Revenues in US$ Million for the Years 2016 through 2024 (includes corresponding Graph/Chart)

6.6 South Korea
Market Analysis

Table 26. South Korean Recent Past, Current & Future Analysis for Electronic Toll Collection (ETC) Systems Market Analyzed with Annual Revenues in US$ Million for the Years 2016 through 2024 (includes corresponding Graph/Chart)

6.7 Rest of World
A. Market Analysis
Outlook
India: NHAI’s Mandate for Implementation of National ETC Program Presents Huge

+44 20 8123 2220
info@marketpublishers.com

Opportunity for ETC Systems Market
Middle East Focuses on ETC Projects to Generate Revenues and Avoid Delays at Tolls
B. Market Analysis

Table 27. Rest of World Recent Past, Current & Future Analysis for Electronic Toll Collection (ETC) Systems Market Analyzed with Annual Revenues in US$ Million for the Years 2016 through 2024 (includes corresponding Graph/Chart)

7. COMPANY PROFILES

Total Companies Profiled: 62 (including Divisions/Subsidiaries - 69)
The United States (18)
Canada (3)
Japan (4)
Europe (29)
  France (6)
  Germany (4)
  The United Kingdom (1)
  Italy (3)
  Spain (3)
  Rest of Europe (12)
Asia-Pacific (Excluding Japan) (13)
Latin America (1)
Africa (1)

+44 20 8123 2220
info@marketpublishers.com

I would like to order

Product name: Electronic Toll Collection (ETC) Systems: Market Research Report
Product link: https://marketpublishers.com/r/E2B2378E72CEN.html
Price: US$ 5,600.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/E2B2378E72CEN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

**All fields are required

Custumer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970