GNSS Consulting Company Presentation





What we offer



GNSS Consulting specializes in supporting the design, development, evaluation and implementation of satellite positioning solutions for electronic tolling and road telematics. We support toll system operators and technology suppliers in the preparation of bids for public tenders in the deployment of GNSS-based solutions for electronic tolling and provide advisory services to road authorities and



toll chargers who procure such solutions. For each project we put together a team of independent and highly experienced experts. Dipl.-Ing. Norbert Schindler, CEO and Founder of GNSS Consulting, has 20 years of experience in the satellite-based solutions for electronic tolling and for road user charging (RUC) in Europe, Asia and the Americas.

References for GNSS-Based Tolling in Europe in the Private Sector











Technical Advisory to draft, review and provide overall support in the competitive dialogue sessions for the proposal of the GNSS-based solution in Alsace, France.

Technical Advisory for drafting a proposal in the bid for "Toll Collect," the German GNSS-based national tolling system.

Technical Advisory in preparing an offer for a GNSS-based tolling solution in Poland, with consortium partners.

Technical Advisory in the development of a European Electronic Toll Services platform with international partners.

References for GNSS-Based in Tolling and Telematics in the Public Sector





https://www.euspa.europa.eu/





https://bpjt.pu.go.id/



www.sthaarconsulting.com

Evaluation and review of Horizon

Europe proposals and projects that deploy Galileo and European GNSS beyond the state-of-the-art.

Technical Advisory to specify and procure a GNSS-based telematics solution for all vehicles transporting passengers and cargo in Uruguay.

Technical evaluation of the new GNSS-based tolling solution that replaces all toll plazas on the national motorways for the Indonesian Toll Road Authority.

Preparation of a study on international practices using GNSS-based tolling and its suitability for a Distance Tax in India.

Interviews



March 2023







The Future of Road User Charging with Apps

"Smartphones are beginning to play a role in toll charging through the use of geo-location data and the data connectivity of the mobile phone network infrastructure." "Indonesia's new satellite-based tolling system replaces all toll plazas with smartphones and GNSS-based OBUs."

TOLL INSIGHT Tolling Industry Discussions

"In the coming years, the cost of satellite-based OBUs will not differ much from that of conventional microwave tags. GNSS-based solutions can have a clear advantage."

Future Trends in Tolling and Road User Charging

"Asia is moving forward with GNSS-based tolling solutions. It will be fascinating to watch these countries take the international lead in tolling innovation."

Publications in Tolling and Mobility





2020 "<u>EETS & Fleet Management: A Fleeting Moment</u>" *Thinking Highways* (H3B Media), Vol. 15, pp. 4-7.



2020 "Mobility as a Service: MaaS Observation" Thinking Highways (H3B Media), Vol. 15, pp. 16-19.



2019 "<u>Tolling: Über EETS</u>" *Thinking Highways* (H3B Media), Vol. 14, article 13.



2019 "<u>Tolling: Eastern Europe Roundup</u>" *Thinking Highways* (H3B Media), Vol. 14, article 18.

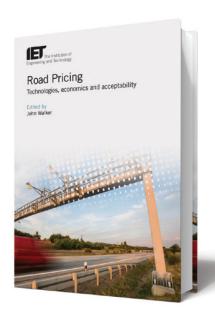


2018 "Satellite Parking: Birth of an Idea" Thinking Highways (H3B Media) Vol 13, pp. 40-41.

Book on Road Pricing



"GNSS-based tolling: standards and implementations" Norbert Schindler and Erich Erker, in *Road Pricing: Technologies, economics and acceptability* (Institution of Engineering and Technology), London, pp. 403-443.



"Road pricing is increasingly being used in both developed and developing countries: in the former to combat congestion and pollution, to compensate for falling revenues from fuel duty, to improve the efficiency of the existing transport infrastructure, and to curb carbon emissions; in the latter, also to fund new transport projects. This book looks at examples around the world, the technologies implemented, how the pricing regimes have worked out and how successful the systems have been."

Editor: Dr. John Walker ISBN: 978-1-78561-205-3

https://www.theiet.org/resources/books/transport/rdpri.cfm



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