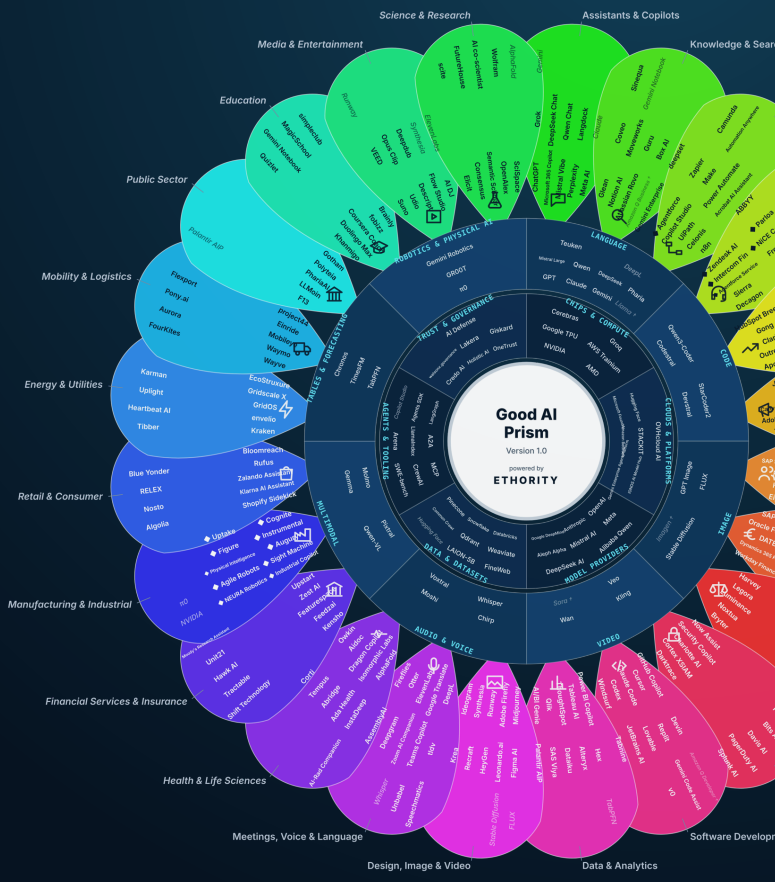
ETHORITY
AI BUSINESS OPERATING SYSTEM



GOOD AI PRISM · SECTOR BRIEF 2026/27 · MOBILITY & LOGISTICS · GLOBAL EDITION

Put AI to work in mobility and logistics

Where AI already plans supply chains, moves freight and drives vehicles, what the market offers, and the rules by jurisdiction.

24
AI offerings mapped in Mobility & Logistics

500,000
paid driverless rides a week by Waymo in ten US cities (Mar 2026)

2.9m
truck-driver jobs unfilled worldwide, 502,000 of them in Europe (IRU, 2026)

Created by Sten Franke with a people and governance lens by Severin L. Wilson · October 2026

AT A GLANCE

Mobility is where AI leaves the screen and enters the street

AI already plans supply chains, prices freight and tracks shipments. Driverless vehicles have moved from test tracks to paid service, while logistics faces a growing shortage of drivers and staff.

This brief applies the Good AI Prism Market Study 2026/27 to mobility and logistics. It combines the study's market map of 24 AI offerings with current research on adoption, autonomous driving, safety, workforce and rules across major jurisdictions. Europe is ETHORITY's hub market and Germany its home and test market, so both get the closest look. The brief ends with the questions to settle before a pilot and with how ETHORITY helps.

51%
of German logistics firms use AI, up from 22% in 2022 (Bitkom, Sep 2026)

1,975
robotaxis operated by Pony.ai in mid-2026, more than 3,500 planned by year-end (company filing)

85%
fewer serious-injury crashes for Waymo than human drivers over 56.7m miles (peer-reviewed, company-authored)

70,000+
truck drivers missing in Germany (logistics associations, Jan 2026)

17%
of supply-chain leaders use AI to redesign operations; 83% scale it gradually (Gartner, May 2026)

about 20%
of EU road-freight vehicle-kilometres run empty (Eurostat)

About this brief

Market figures come from the Good AI Prism 2026/27 study dataset: every entry is recorded with a dated source from the provider's own pages. Job groups are ETHORITY's classification. External figures name their source, population and date; company figures are labelled. This brief is not legal advice.

WHERE MOBILITY STANDS

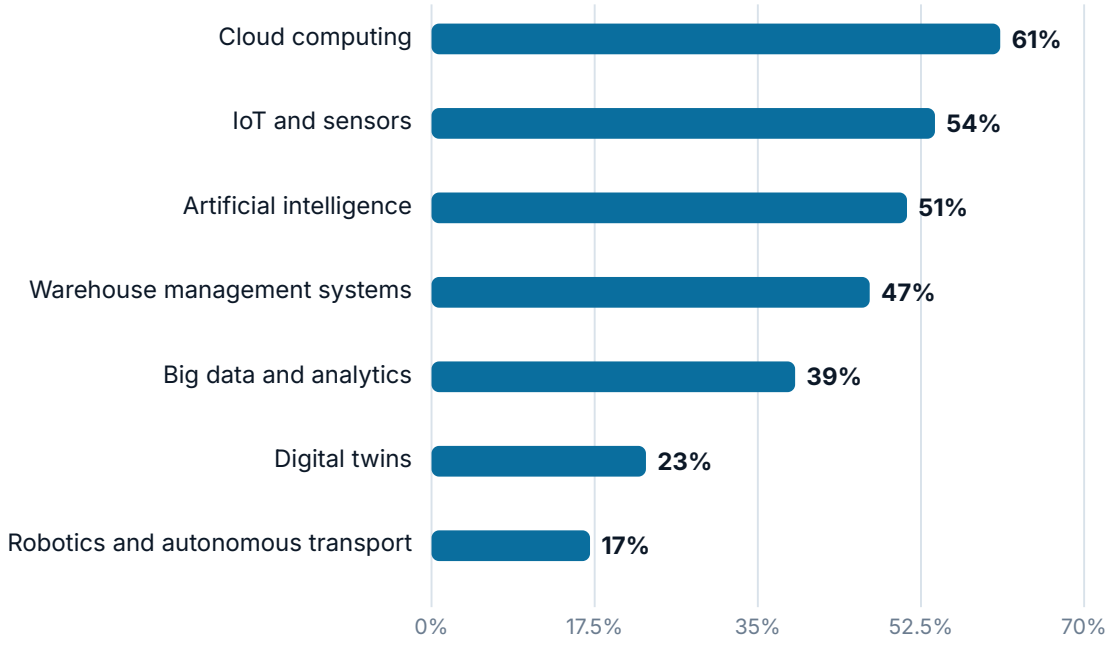
From planning software to driverless service

Logistics has embraced AI quickly: 51% of German logistics firms use it, up from 22% in 2022, and they expect more supply-chain transparency (66%), lower environmental impact (60%) and lower costs (49%) (Bitkom, 2026). Yet only 17% of supply-chain leaders use AI to redesign their operating model; most scale it step by step (Gartner).

Autonomous driving has become a service. Waymo gave about 500,000 paid rides a week in ten US cities in March 2026, Pony.ai runs nearly 2,000 robotaxis in China and plans Europe with Uber, Apollo Go drives in Dubai, and Aurora's driverless trucks have covered about 440,000 miles in Texas and the Southwest. In Hamburg, MOIA and Volkswagen test the ID. Buzz AD with passengers, aiming for driverless approval in 2027.

Exhibit 1 · Test market Germany: technologies in logistics

Share of German logistics firms using each technology, 2026



Bitkom, Digitalisierung der Logistik 2026 · 502 firms with 20+ staff; survey

THE WORKFORCE SIDE

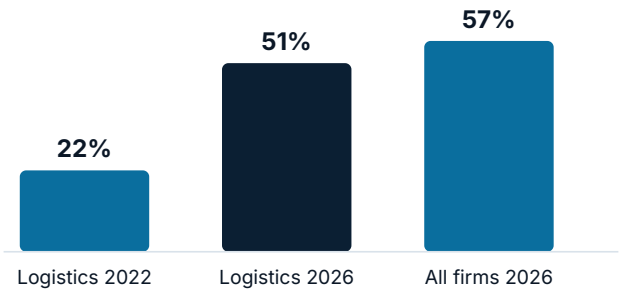
AI arrives as drivers run out

The road-freight workforce is shrinking. The IRU counts 2.9 million unfilled truck-driver jobs worldwide and 502,000 in Europe, with 660,000 European drivers retiring by 2030. Germany misses more than 70,000 drivers: 30,000–35,000 retire each year against 15,000–20,000 new entrants.

Shortages reach the whole chain: German logistics firms report gaps in couriers (64%), drivers (55%), dispatchers (53%) and warehouse staff (48%) (Bitkom). 55% of supply-chain leaders expect agentic AI to reduce entry-level hiring (Gartner, 2026).

Exhibit 2 · Test market Germany: firms using AI

Share of German firms with 20+ staff using AI



Bitkom, logistics survey 2022 and 2026 (502 firms) and economy-wide survey 2026 (603 firms)

70,000+

truck drivers missing in Germany; about a third of drivers are over 55 (associations, Jan 2026)

55%

of supply-chain leaders expect agentic AI to reduce entry-level hiring (Gartner, Feb 2026)

THE RULES

Europe sets the reference dates

ETHORITY reads the rules by jurisdiction. Europe is the hub market: vehicles are governed by type-approval law, which brings AI Act requirements in through delegated acts, while AI used as a safety component in road traffic management is high-risk. Germany, the home and test market, already allows level-4 driving in defined areas.

European Union: the hub market

2022	ADS	EU type approval for the automated driving systems of fully automated vehicles in small series (Regulation 2022/1426).
2 Feb 2025	IN FORCE	Prohibited AI practices apply; providers and deployers take measures to support AI literacy (Art. 4, as amended).
Jul 2027	EFTI	Authorities must accept electronic freight transport information.
2 Dec 2027	ANNEX III	High-risk: AI used as a safety component in the management and operation of road traffic (point 2). AI in vehicles follows type-approval law (Annex I), with duties from Aug 2028.

AI Act dates as amended by the Digital Omnibus on AI, Regulation (EU) 2026/1744, in force since 27 July 2026.

Germany, the home and test market, adds its own building blocks

- Autonomous Driving Act (2021) and ordinance (2022): level-4 vehicles in approved operating areas, with technical supervision and approval by the KBA.
- MOIA and Volkswagen: ID. Buzz AD tests with passengers in Hamburg since Jul 2026, with safety drivers; driverless approval targeted for 2027.
- FERNRIDE: first TÜV SÜD certification of an autonomous terminal tractor under the EU Machinery Directive (Jul 2025).

RULES BY JURISDICTION

Where you drive decides which rules apply

Rules for AI in mobility combine vehicle approval, traffic law and AI law. Driverless service is allowed in parts of the US, China, the Gulf and, step by step, Europe. Status October 2026.

JURISDICTION	INSTRUMENT	APPLIES	WHAT IT MEANS FOR MOBILITY
European Union	AI Act as amended; vehicle type approval; ADS Regulation 2022/1426	Annex III from 2 Dec 2027; Annex I from 2 Aug 2028	AI in traffic management is high-risk; AI in vehicles is regulated through type approval.
Germany	Autonomous Driving Act and AFGBV	Since 2021 and 2022	Level-4 operation in approved areas with technical supervision; KBA approval.
United Kingdom	Automated Vehicles Act 2024	Pilots from spring 2026	Legal framework for self-driving vehicles; commercial taxi and bus pilots.
United States	NHTSA AV Framework; Standing General Order on crash reporting	Since Apr 2025	Federal exemptions and crash reporting; states decide on operation.
US states	California DMV and CPUC; Texas SB 2807	In force	Permits for driverless passenger service in California; state authorisation for driverless commercial operation in Texas.
China	Beijing Autonomous Vehicle Regulations; MIIT level-3 approvals	Since Apr 2025; approvals Dec 2025	City rules for driverless service; first approvals for level-3 cars.
Japan	Road Traffic Act amendment	Since Apr 2023	Level-4 driving allowed in designated areas with permits.
United Arab Emirates	Dubai driverless ride-hailing licences	Since Apr 2026	Fully driverless commercial service; target of 25% of trips smart or driverless by 2030.

Sources: statutes, regulators and company filings (EU, KBA, UK DfT, NHTSA, California DMV and CPUC, Texas, MIIT, Beijing, MLIT, Dubai RTA). Status October 2026. Not legal advice.

Where the 24 providers are headquartered

10
Europe, of which 6 in Germany

11
North America

3
Asia and Middle East

Headquarters as of October 2026 from provider pages and public sources. Alphabet owns Waymo; Trimble owns Transporeon; Uber owns Uber Freight; Intel is the majority holder of Mobileye.

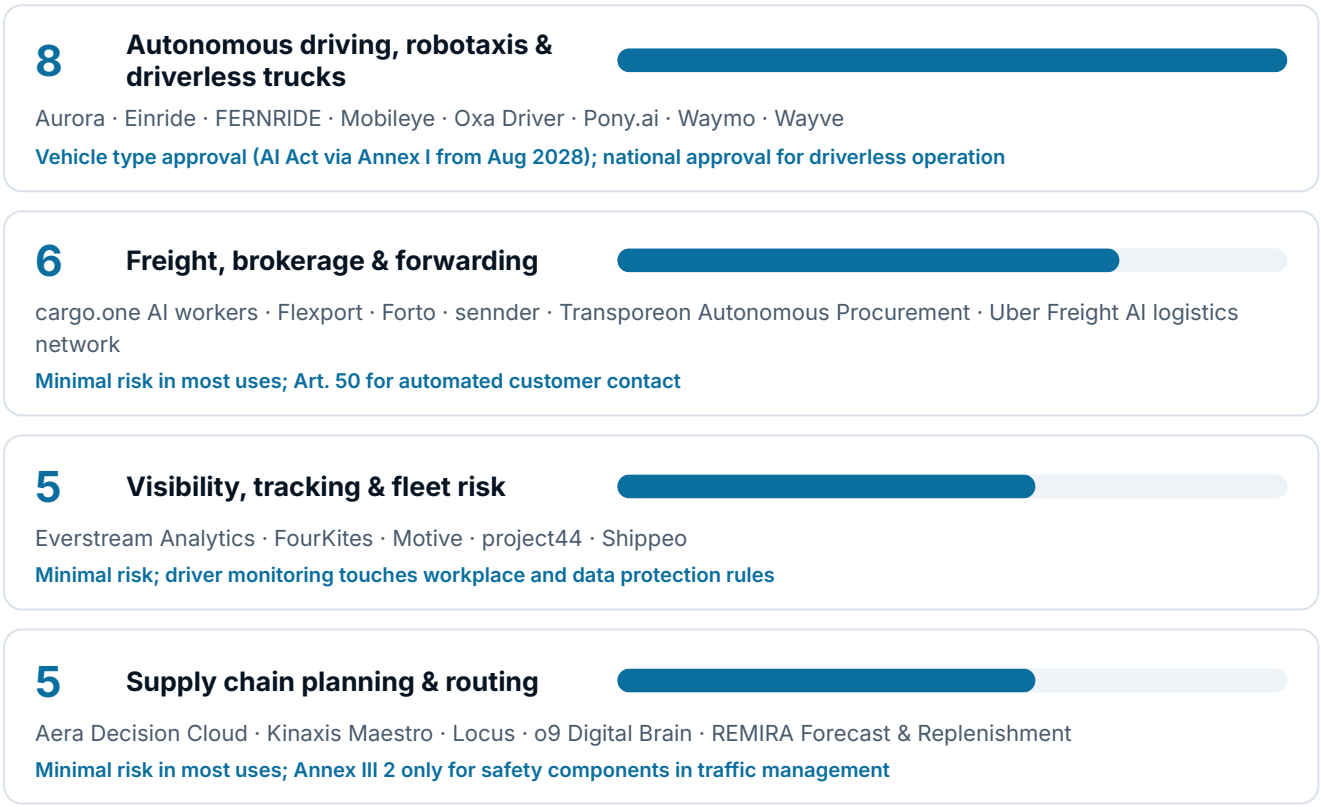
THE MARKET MAP

24 AI offerings for mobility, from the control tower to the driverless truck

The Good AI Prism 2026/27 places 24 offerings in Mobility & Logistics. Eight drive vehicles: robotaxis, driverless trucks, terminal tractors and driving systems. Six broker and forward freight, five give visibility, tracking and fleet risk, and five plan supply chains and routes.

Exhibit 3 · The Mobility & Logistics map by job

Number of offerings per job group; names alphabetical, not a ranking

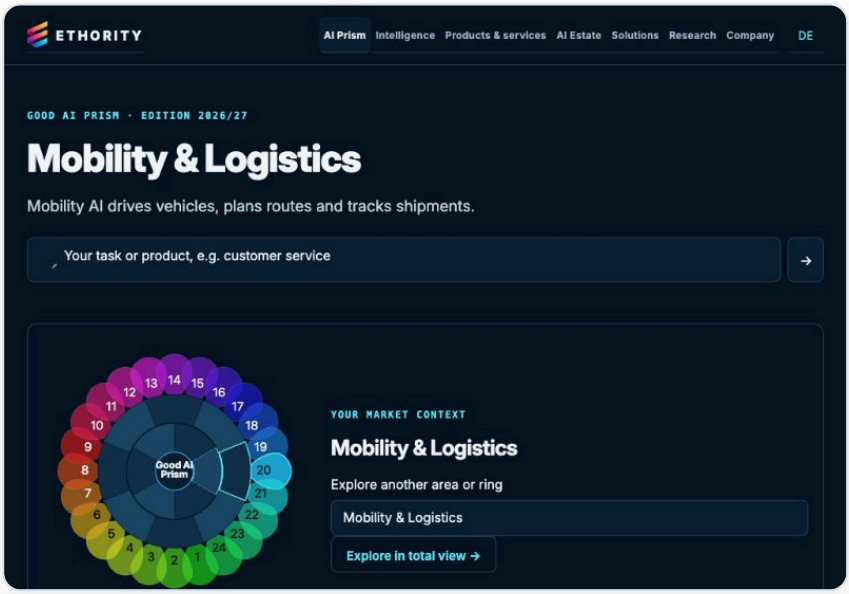


Good AI Prism 2026/27 study dataset · job groups: ETHORITY classification · The AI Act classifies uses, not products. Whether an offering is high-risk depends on its intended purpose and on vehicle approval law.

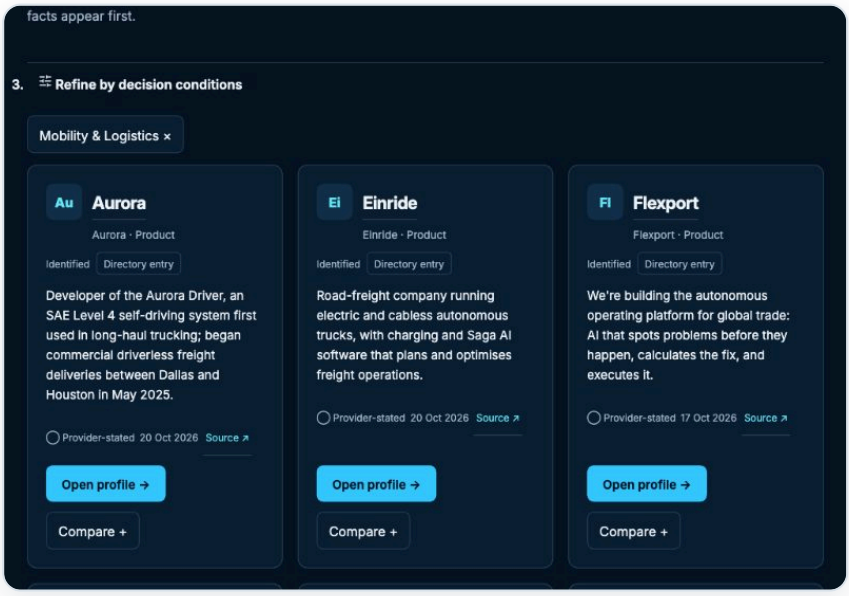
ONLINE VIEW

The Mobility & Logistics area in the Good AI Prism

The online Good AI Prism places each offering in its business area and shows the source and date behind every entry. The preview below shows the Mobility & Logistics area as it appears in October 2026. Select an area to see the offerings placed there, then open a profile to check the provider’s own statement, its date and the decision facts recorded for it, such as pricing basis, data hosting and training on customer data where documented.



Good AI Prism online preview: Mobility & Logistics selected, October 2026.



Entries with their source and date. This brief counts all 24 entries recorded for the edition.

NEEDS AND DECISIONS

What mobility leaders need, and what to ask before a pilot

What the evidence shows

Drivers
2.9 million truck-driver jobs unfilled worldwide; more than 70,000 in Germany (IRU; associations).

Efficiency
About a fifth of EU road-freight vehicle-kilometres run empty (Eurostat).

Disruption
71% of German logistics firms name supply-chain disruption as a challenge (Bitkom, 2026).

Safety
About 19,400 people died on EU roads in 2025 (European Commission).

Seven questions before AI moves goods or people

1. Does it control a vehicle or a traffic safety function? Then type approval and the AI Act's high-risk rules apply.
2. Which approvals does driverless operation need where we run, and who is the technical supervisor?
3. Which data from drivers, vehicles and customers does it use, and how is privacy protected?
4. How do drivers and dispatchers override or correct AI decisions?
5. How does it integrate with our transport management and partners' systems, and can we exit?
6. Do customers know when they deal with AI agents in booking and service?
7. Which measures decide scaling: empty runs, on-time delivery, cost per shipment, safety events and CO2?

WORKFORCE PLAN

Plan the people side with the technology

When agendas change quickly, the people side breaks first: half-adopted tools, skills that lag the system, employees who were not involved, and decisions no one owns. Plan adoption, training, employee participation and accountable oversight as part of every staged commitment, not after it.

Severin L. Wilson, workforce lens in the Good AI Prism Market Study 2026/27

Workforce annex to the pilot charter

Affected roles	Which drivers, dispatchers, planners and warehouse roles the pilot touches, and how many people
Baseline workload	Planning time, empty runs, delays and errors today, measured before the pilot
Skills needed	Operating, supervising and overriding AI; training plan and owner
Staff involvement	Works council and driver representatives from the start
Oversight owner	The named person accountable for decisions that affect safety and customers
Escalation and override	How drivers and dispatchers override an AI decision, and the response time
Capacity plan	Where returned time goes: exceptions, customer care, new services or training; who decides
Measured quality	Errors, safety events, delays and complaints, tracked with the outcome measure

Saved time is not realised value. Count it when returned time has demonstrably gone into reliable, safe and efficient transport.

NEXT STEPS

A 90-day start for logistics and mobility companies

01
Inventory
List every AI use and model, from planning to driver assistance, including tools staff bring themselves.

02
Classify
Separate planning and visibility from vehicle and traffic safety functions; map each to the rules.

03
Involve
Bring in operations, drivers, the works council, data protection and safety early.

04
Enable
Document AI literacy measures and name accountable people with override rights.

05
Pilot
Run one planning, routing or visibility use with a baseline and the workforce annex.

06
Decide
Scale only on measured empty runs, delivery reliability, cost and safety.

ETHORITY recommendation, derived from the rules and evidence in this brief.

CONCLUSIONS

What the evidence adds up to

AI can keep goods and people moving as drivers and planners grow scarce. The gains come from planning and visibility today, and from autonomy step by step. Five conclusions for decisions now.

1 **Start where data already flows**

Evidence. Half of German logistics firms use AI; they expect transparency, lower costs and emissions.

What to do. Begin with planning, routing and visibility, where results are measured daily. · Where mobility stands

2 **Plan autonomy as a step-by-step programme**

Evidence. Driverless service runs at scale in the US and China; Germany targets driverless approval in Hamburg for 2027.

What to do. Pilot in defined areas, such as yards, terminals and hubs, and prepare approvals early. · The rules

3 **Treat driver shortage as a design constraint**

Evidence. More than 70,000 drivers are missing in Germany and 502,000 in Europe.

What to do. Use AI to make each driver's day more productive and to cut empty runs. · The workforce side

4 **Keep humans able to override**

Evidence. Vehicle and traffic safety functions fall under type approval and high-risk rules.

What to do. Name accountable people and design overrides for drivers and dispatchers. · Questions before a pilot

5 **Measure transport outcomes**

Evidence. About a fifth of EU road-freight kilometres run empty; 71% of firms name disruption as a challenge.

What to do. Count empty runs, reliability, cost, safety and CO2 before and after. · Needs and decisions

THE PROBLEM

Logistics is not short of AI. It is short of drivers, integration and decisions that hold.

Logistics and mobility companies must keep goods moving with fewer people, integrate AI with partners' systems and prepare for autonomy without risking safety.

THE PROBLEM	WHAT WE SEE IN THE EVIDENCE	WHAT IT COSTS
Too few drivers and staff	Hundreds of thousands of driver jobs are unfilled in Europe.	**Lost capacity and higher costs.**
Fragmented systems	Shippers, carriers and platforms use different systems and data.	**Weak visibility and manual work.**
Autonomy rules	Approvals differ by country and by use.	**Slow pilots and unclear liability.**
Disruption	Supply-chain shocks hit most firms.	**Delays and lost customers.**
Trust and safety	Drivers, customers and authorities must trust AI decisions.	**Resistance and incidents.**

The question behind every project

What should improve, which options are credible, what evidence is missing, what implementation requires, and who owns the outcome?

HOW ETHORITY HELPS

From AI ambition to goods that move

ETHORITY helps mobility and logistics companies choose, govern and prove AI: from independent market evidence to decisions that can be defended to customers and authorities, and outcomes measured in transport.

01
Discover
Find and qualify the opportunity: options, evidence, constraints and rules.

02
Create
Design and build the solution with your data, systems and people.

03
Run
Operate it responsibly, with owners, controls and support.

04
Improve
Measure against the objective and adjust.

05
Grow
Turn what was learned into new capability and value.

WHERE A PROJECT CAN BEGIN

AI opportunity case
One use, such as freight procurement, routing or yard autonomy, assessed against evidence, cost and rules, ending in a decision: pilot, redesign, expand or stop.

Market and evidence review
Good AI Prism research profiles and comparisons of the 24 offerings, with a structured check of performance and safety claims.

AI estate audit
An inventory of AI across planning, transport and warehouse, with owners, risks and overlaps.

Governance and readiness
Each use mapped to the AI Act, vehicle approval, data protection and workplace rules, with proportionate controls.

AI literacy for logistics teams
Role-based training for dispatchers, drivers, planners and managers, with named accountability.

From pilot to operation
A pilot charter with baseline, threshold and stop conditions, then building and running the solution on ETHORITY's AI Business Operating System.

Who we work with

Shippers, logistics service providers, carriers, ports and terminals, public transport operators, vehicle makers and associations.

Start with one question. Talk to us: sten@ethority.ai · severin@ethority.ai · ethority.ai/ai-prism-study

ABOUT ETHORITY

From understanding markets to building AI capability

ETHORITY connects market intelligence, research and practical delivery to help organisations put AI to work. It is built as an AI1st organisation: humans and AI agents work on one AI Business Operating System, with the research, engineering and operations to build and run AI after the pilot. Its roots lie in the digital intelligence business Sten Franke founded in 2005, which combined monitoring, research and advisory work to help organisations understand changing markets.

The Good AI Prism is the entry point: research profiles, documented relationships and comparisons help users investigate their options. Advisory, governance and transformation work connect those options with an organisation's objectives, data, systems, people and operating conditions.

SELECTED REFERENCES AND PARTNERS SINCE 2005

Bosch · Bayer · BMW · Siemens · Mercedes-Benz · Coca-Cola · Deutsche Bank · T-Mobile · Telefónica o2 · DHL · EDEKA · AIDA Cruises

Selected historical references and partners from the group's market-intelligence and advisory heritage, in projects or through former group companies.

METHOD

Market figures: Good AI Prism 2026/27 study dataset, Mobility & Logistics area, 24 entries, each with a dated source from the provider's own pages (October 2026). Job groups and AI Act relevance: ETHORITY classification by intended use. Jurisdictions: status October 2026. External figures as cited; company figures and surveys labelled and not combined. Not legal advice.

MAIN SOURCES

- Bitkom, Digitalisierung der Logistik 2026 (n = 502), 10 Sep 2026; Bitkom, AI in the German economy (n = 603), 14 Sep 2026
- Gartner supply-chain surveys, 25 Feb and 6 May 2026; MHI and Deloitte, Annual Industry Report 2026
- IRU, Global Driver Shortage Report, Jun 2026; logistics associations' driver-shortage initiative (BGL, DSLV, BDI and others), Jan 2026
- Kusano et al., Traffic Injury Prevention 2025 (Waymo, company-authored); European Commission, EU road deaths 2025
- Pony AI, Form 6-K, 18 Aug 2026; Waymo and Aurora company statements via press, 2026; Dubai Taxi Company, 1 Apr 2026
- Eurostat, empty runs in EU road freight (reference year 2020)
- Regulation (EU) 2024/1689 (AI Act), Annex I and Annex III point 2; Regulation (EU) 2026/1744; Regulation (EU) 2022/1426; Regulation (EU) 2020/1056 (eFTI)
- Germany: Autonomous Driving Act (2021) and AFGBV (2022); UK Automated Vehicles Act 2024; NHTSA AV Framework (Apr 2025)
- Good AI Prism Market Study 2026/27 and study dataset (ETHORITY, October 2026)

ETHORITY
AI BUSINESS OPERATING SYSTEM



FROM BUSINESS AMBITION TO AI THAT WORKS

Put AI to work, with evidence.

ETHORITY helps organisations choose, govern and prove AI: from independent market evidence to decisions that can be defended and outcomes that can be measured.

CONTACT



Sten Franke
Founder, Principal Architect & Lead Creator
sten@ethority.ai
linkedin.com/in/stenfranke



Severin L. Wilson
Chief Business & Transformation Officer
severin@ethority.ai
linkedin.com/in/severinwilson

STUDY REPOSITORY AND UPDATES

ethority.ai/ai-prism-study

ethority.ai

THE ETHORITY STUDY SUITE

01	**Put AI to Work: The Good AI Prism Global Market Study 2026/27**	Global edition · EN and DE
02	**Put AI to Work: The Good AI Prism Market Study 2026/27**	Germany–US focus · EN and DE
03	**Good AI Prism sector briefs 2026/27**	HR & Workforce · Health & Life Sciences · Financial Services & Insurance · Public Sector · Education · Energy & Utilities · Mobility & Logistics · Global EN and DE **YOU ARE READING**
04	**AI for Care in Ageing Societies**	Study 2026/27 · EN, DE, US and Global editions
05	**AI in Pharma, Biotech and Longevity**	Study 2026/27 · Global EN and DE
06	**The Social Media Prisma 2009–2025**	Historic paper · EN and DE

© 2026 ETHORITY & STEN.AI LLC · San Francisco HQ · European operations: Hamburg, Germany · ethority.ai
AI Prism for Mobility & Logistics · Sector brief 2026/27 · Global edition 1.0, 22 October 2026 · All rights reserved. Exhibits may be quoted with source attribution.