

COMMERCIAL FLEET TELEMATICS

Global Study

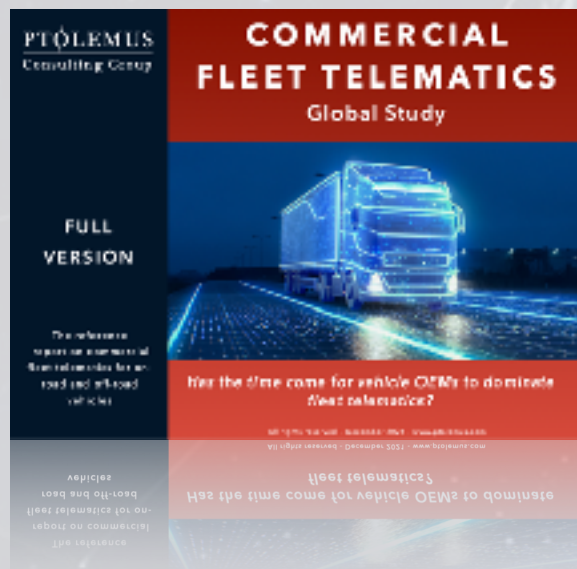
**FREE
ABSTRACT**

The reference
report on commercial
fleet telematics for on-
road and off-road
vehicles



*Has the time come for vehicle OEMs to dominate
fleet telematics?*

This is the most complete report on telematics solutions for commercial fleets of on-road and off-road vehicles



More than just market research.

A strategic analysis on the telematics business of commercial vehicle and heavy equipment fleets

- A **632-page** analysis of the global commercial fleet telematics market based on:
 - 11 years of constant market surveillance
 - 26 interviews with key stakeholders
 - Nine months of desk research
- An in-depth introduction to the **commercial fleet telematics market, with analyses into** the telematics value chain, new technologies, benefits of telematics, and Covid-19 impact
- **A Total Cost of Ownership (TCO) analysis**
- **Granular analysis of telematics in on-road, construction and agricultural industries** that includes:
 - Cost structure, revenues and telematics needs of fleet operators
 - Supply and demand analysis of current telematics solutions
 - Major players in the telematics value chain and their strengths
- An in-depth assessment of **39 companies supplying fleet telematics (23 TSPs and 16 OEMs) analysing:**
 - Their telematics business and corporate strategy
 - Their value proposition, pricing model, target segments, positioning and partnerships
 - A benchmark and gap analysis of their solution
- **2020-2030 bottom-up market forecasts encompassing:**
 - The number of vehicles in use for both on-road fleet telematics and off-road fleet telematics
 - Subscriptions and revenues for the on-road telematics market, split by OEM and aftermarket
 - Subscriptions and revenues for the off-road telematics market, split by OEM and aftermarket
 - Regional projections for Europe, Americas, Asia Pacific, Africa and Middle East

The study answers the following key strategic questions on the commercial fleet telematics landscape

What is the strategy of major OEMs in telematics?

What are customers' expectations to a fleet telematics service provider?

How can telematics improve the TCO of commercial fleet vehicles?

What will be the role of aftermarket devices in the future commercial fleet telematics market?

Will OEMs' telematics solutions challenge existing TSPs' business?

What are the trends and drivers for commercial fleet telematics growth between 2020 and 2030?

What is the impact of government legislation on the commercial telematics industry?

What will be the role of new and emerging players in the CFT* value chain?

In which country will CFT* grow the most by 2030?

Which suppliers are leading in the market?

What are the differences between on-road and off-road commercial fleet telematics?



The commercial fleet telematics market is growing strongly, and OEMs are on the path to overtake TSPs

Fleet telematics relies on various technologies to create, transmit, store, analyse and visualise data. Technological progress in areas like vehicle connectivity, geo-localisation and electrification opens for a potential shift in who the dominant players in fleet telematics are.

Since the mid-90s, the industry has been heavily associated with the aftermarket, with countless players providing both hardware and service solutions to meet the needs of commercial fleets.

Since the COVID-19 pandemic began, demand for last mile delivery services has been booming, with a big impact on delivery fleets. Examples of how this industry is being affected can be seen in organisations like **Hermes**. The company has had to **compress its five-year investment plan in just five months** as the level of parcel volumes being handled are at a level that was originally planned for in 2025.

Old habits die hard...

The on-road* commercial fleet market is still wary of telematics. There is general agreement that telematics, **if correctly implemented**, can yield significant benefits. However, there are still too many examples of data overload occurring, with fleet demands for more personalised insights being overlooked in favour of meeting the demands of the many. In the off-road*

segment, issues abound with respect to data privacy and vehicle ownership rights in regions like North America and Europe. However, big telematics drivers are the shortage of skilled operators, sub-optimal management of vehicle TCO,** and inefficient operation of equipment stemming from excess fuel usage.

... but OEMs are responding

Aftermarket Telematics Service Providers (TSPs) currently dominate the commercial fleet telematics market. That dominance will increasingly be challenged during this decade. Other players, like telecom operators, now have the potential to circumvent TSPs and partner directly with OEMs.

Being present in the entire value chain, OEMs keep adding connectivity and app marketplaces with many specialist services to their vehicles. By 2024, we expect approximately 83% of all new vehicles to have embedded telematics. Almost all OEMs have adopted the strategy of offering free, often time-limited telematics solutions with the purchase of a new vehicle or machine equipment.

The connected, autonomous and electrified future for commercial vehicles will play into the hands of OEMs

We expect that the shift to electrified powertrains, autonomy and connectivity will fundamentally strengthen OEMs' position. TSPs will lose ground as OEMs become a major source of data/insight to enable fleet operators to **monitor, maintain**, and crucially **compare, their electrified products** with existing fleet vehicles. As a result, OEMs' share of on-road telematics subscriptions will grow from 3% in 2020 to 46% in 2030. This will leave OEMs near parity with TSPs.

A market that will multiply sixfold volume-wise

The 2020 global fleet telematics market consisted of 23 million active subscriptions. **Nearly 70% of global subscriptions are accounted for by the on-road sector**, whilst the geographical concentration of subscriptions remains evenly balanced between Asia Pacific, Europe and North America.

However, over the next eight years, APAC is forecast to grow twice as fast as Europe and North America, resulting in 70 million active subscriptions in the region by 2030.

We expect active global subscriptions to commercial fleet telematics to surpass **154 million**, and represent a global market worth **€24 billion by 2030**. On-road telematics will dominate with 95% of the 2030 revenues, while the aftermarket will represent 73% of the global revenues.

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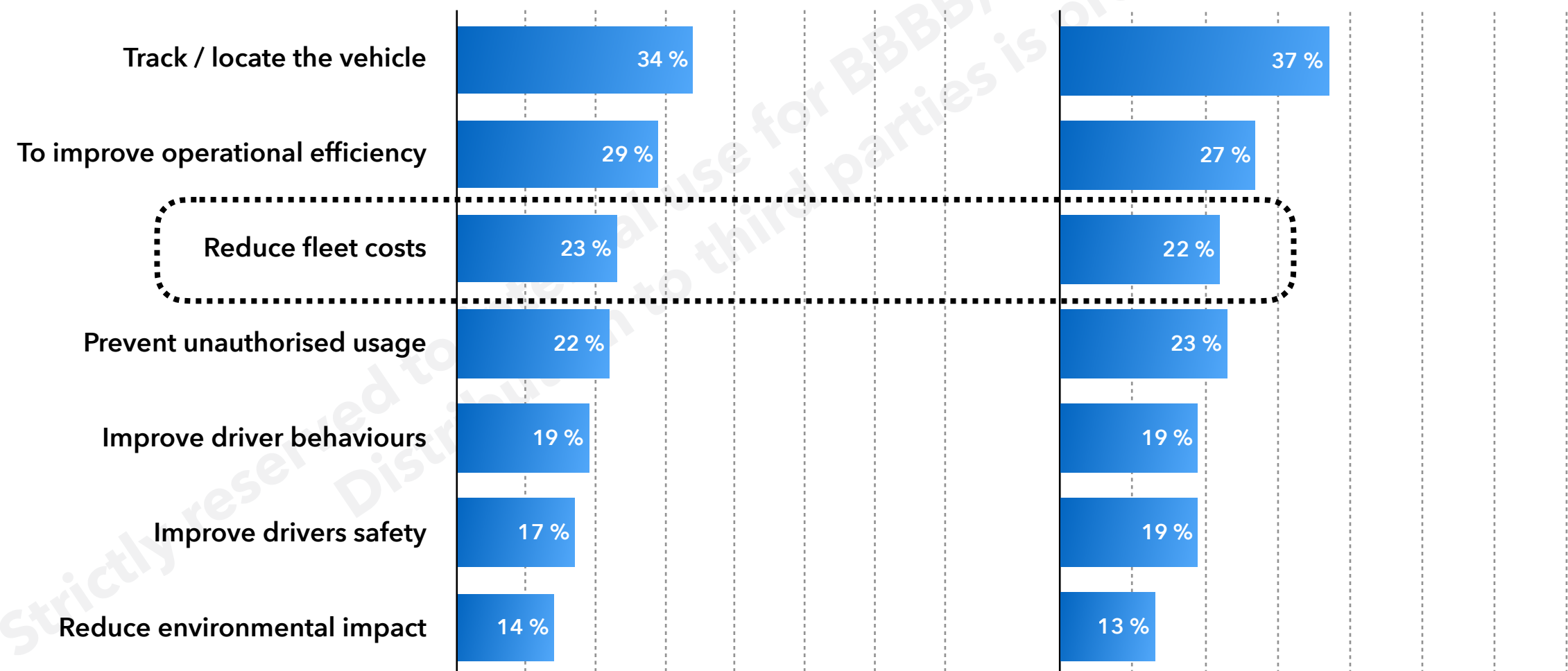


Extract of two TCO slides

Track and trace, improving efficiency and reducing costs are important factors for adopting telematics in LCVs

Main reasons for using telematics by company size

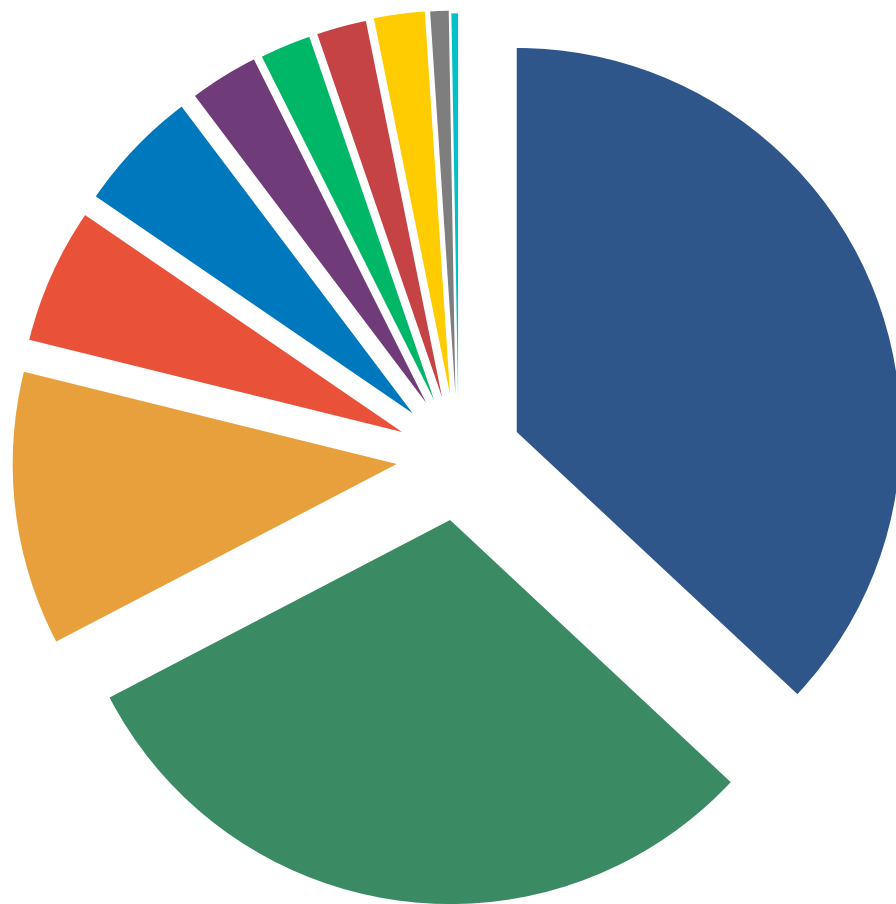
Sample of fleets of light commercial vehicles (LCVs)



By applying fleet telematics, PTOLEMUS estimates an average % saving* on TCO per vehicle is possible

TCO variation using FMS solutions

TCO for HGVs with FMS (UK case)



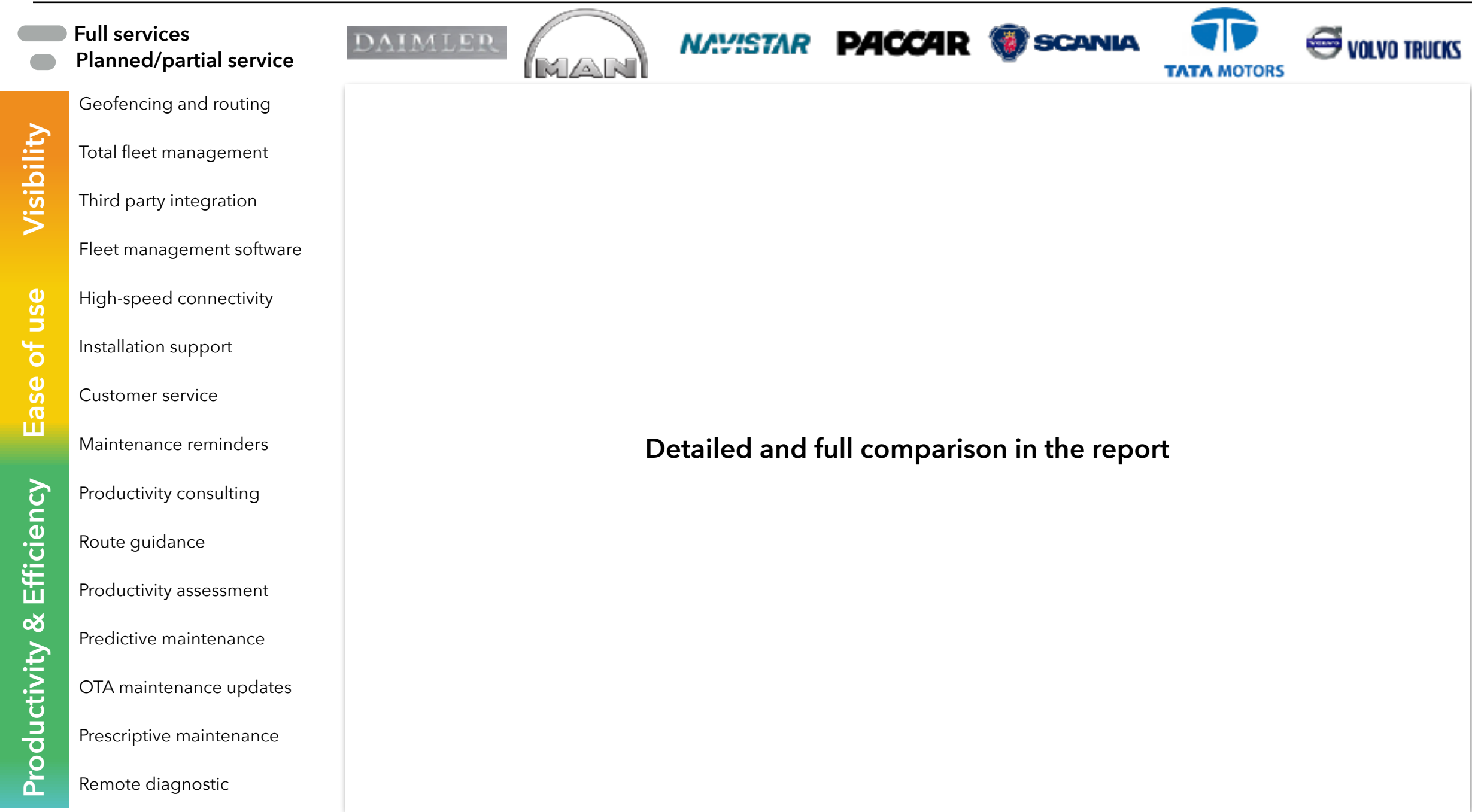
- Costs reduction thanks to telematics are most impacting on (read the full report)
- **In the UK case previously explained, introduction of FMS solutions could save up to % of the TCO**
 - The total cost per vehicle per year would be reduced from €* to €*, achieving savings of €*
 - **The FMS cost represents only % of the TCO**
- Fuel and Driver costs could be improved thanks to routing and coaching features, **reducing costs by %**
- For instance, TX-FUELBOT from Transics, **uses Big Data analytics to optimise fuel consumption**
- Maintenance is the sector with the highest average **TCO reduction, it can reach %;**
 - In the future **the savings could increase more thanks to predictive and prescriptive maintenance**
- According to our primary research, in-cab cameras and driver coaching solutions, could **reduce insurance costs up to %**
- **Telematics services can reduce the TCO by % on average**



Extract of two slides from the gap analysis of the market

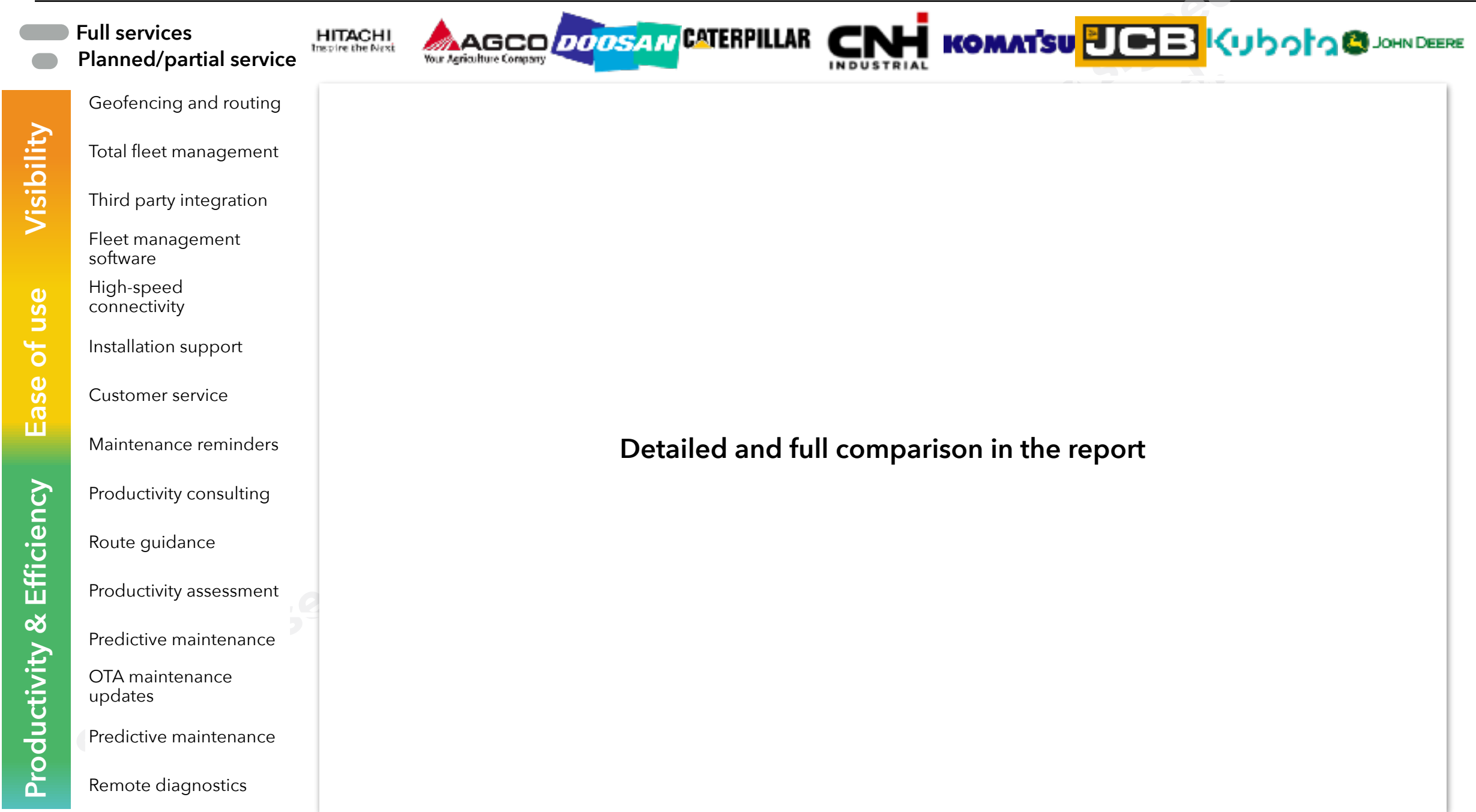
OEMs are ahead of TSPs in the development of predictive maintenance services

Availability of telematics services provided by OEMs



OEMs target visibility and productivity services for off-road telematics, but few provide productivity consulting

Availability of telematics services provided by OEMs

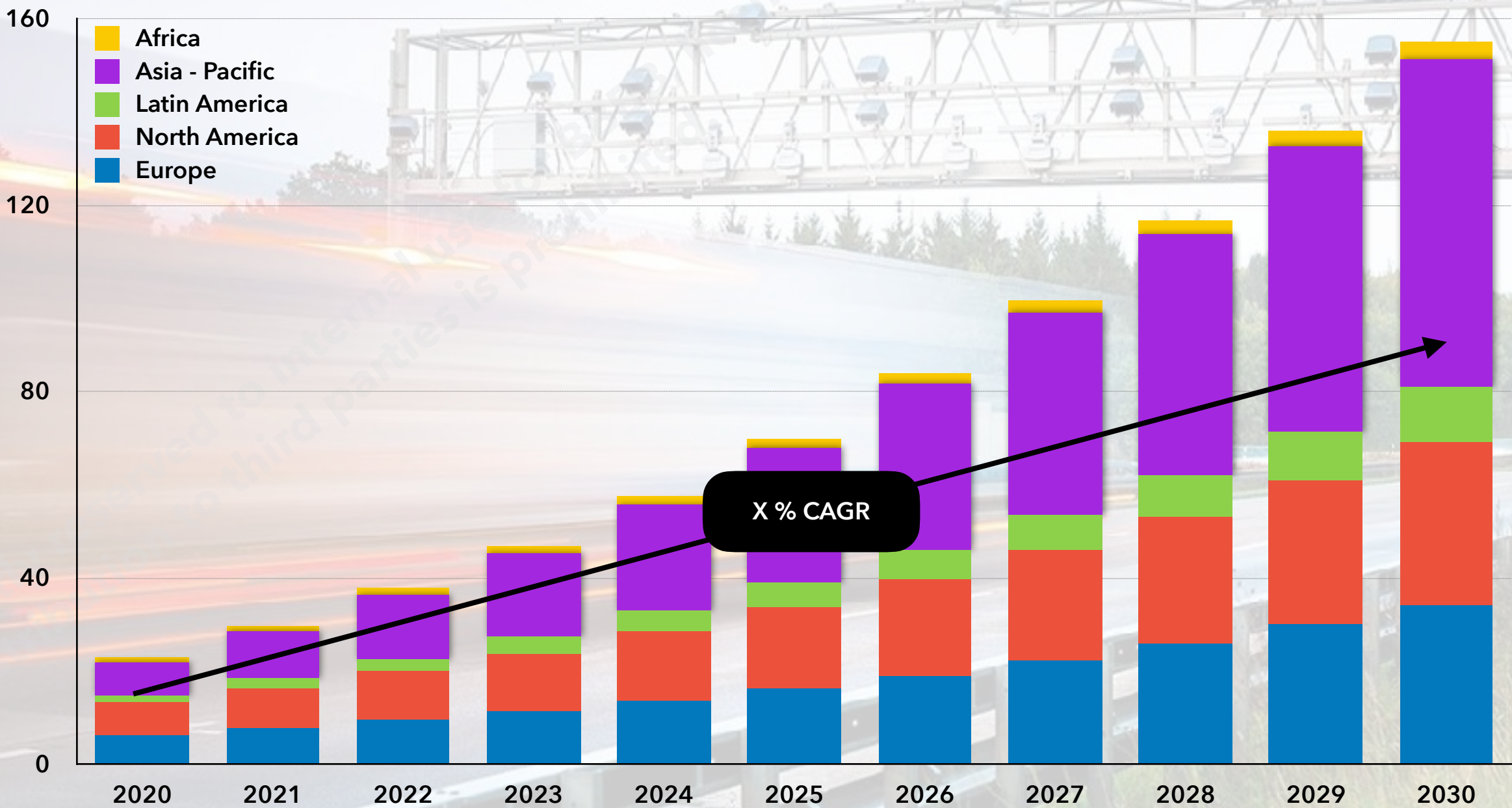




Extract of two forecast slides

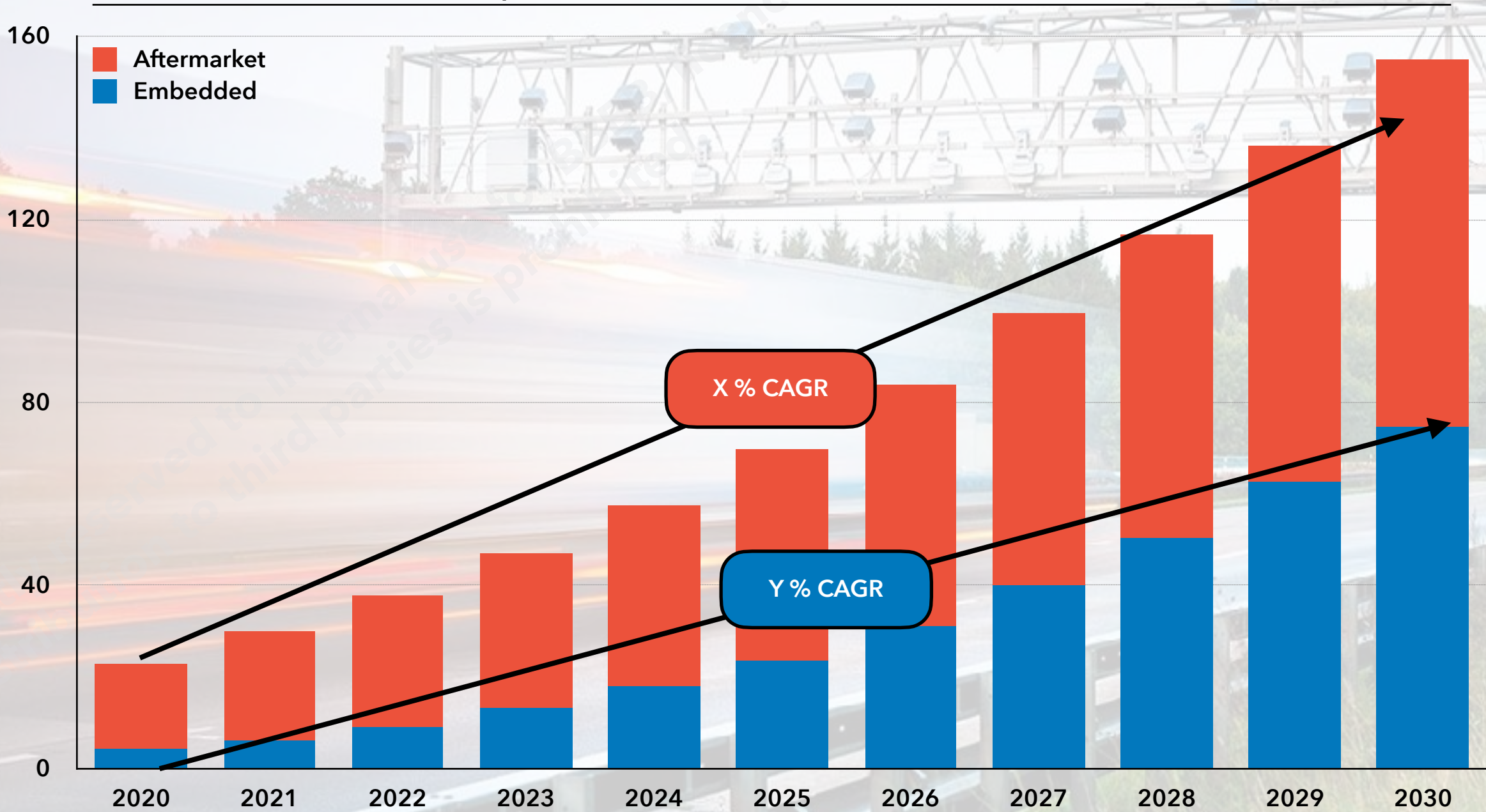
Global active subscriptions are forecast to grow at X% per annum, with Y% of subscriptions based in APAC by 2030

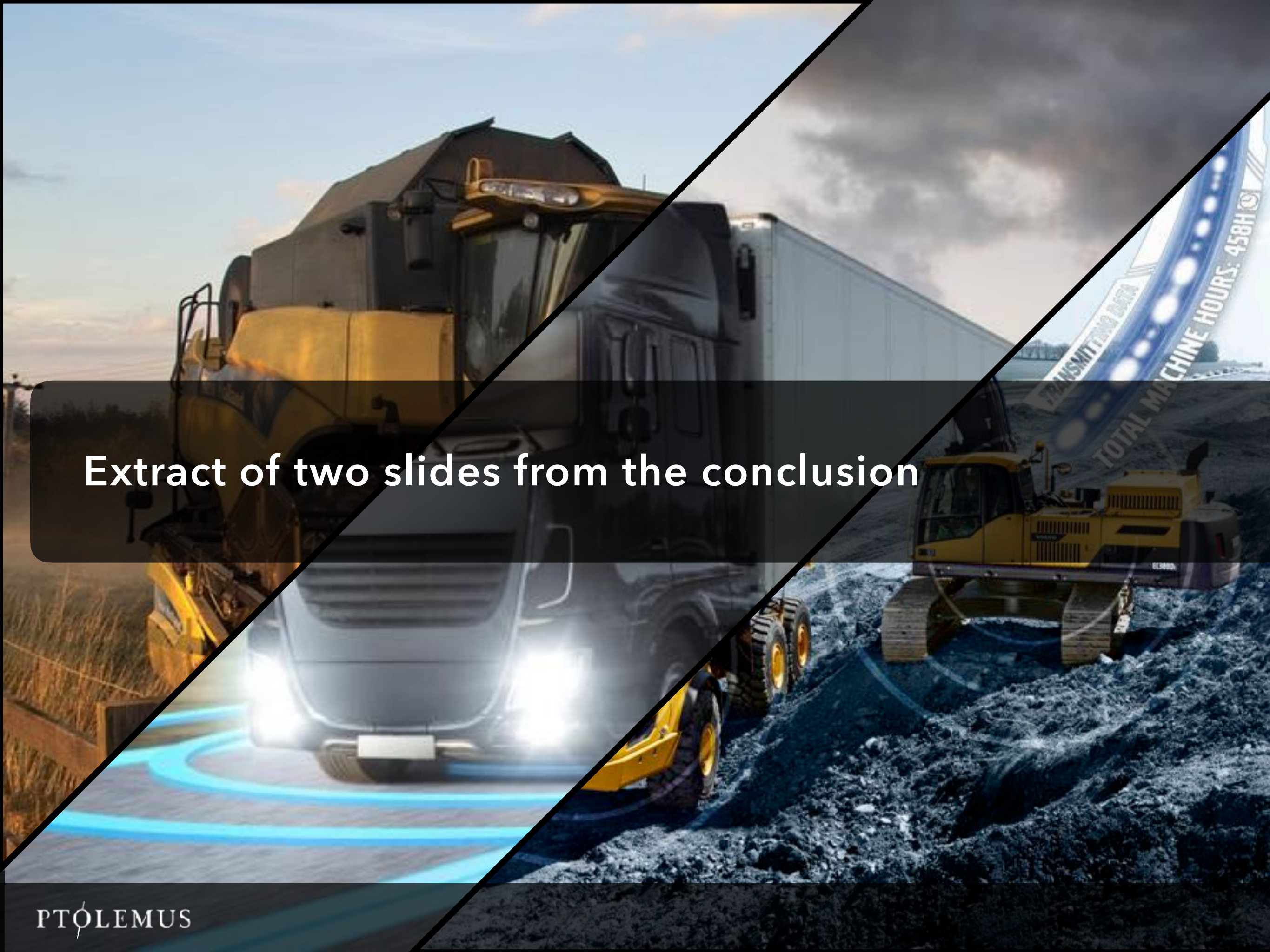
Global subscriptions from on-road and off-road for embedded and aftermarket telematics (millions)



Embedded subscriptions will grow at X %, reducing global aftermarket subscriptions to Y% by 2030

Global subscriptions for embedded and aftermarket telematics (millions)





Extract of two slides from the conclusion

TSPs currently dominate the on-road sector but OEMs will increase their share by controlling access to data

- Today, OEMs' telematics offerings are at a basic level when compared to aftermarket TSPs but will start to leverage the **data ownership** from their embedded devices
- OEMs are focusing on **future market opportunities**, for example Traton's RIO, which is focused on **goods management** rather than vehicle management. Other examples include:
 - Uber Freight, Sixth sense, Sendr* and Project44* are all initiatives integrating telematics with the transport of goods
- OEMs are investing in TSPs that serve **specific verticals**:
 - Daimler acquired Science Platform, a fleet software platform focused on logistics and transportation sector
 - The platform acts as a marketplace and offers own services as well as third-party apps (e.g. Geotab is integrated into Science PlatformOn-road
 - Isuzu Commercial Truck recently confirmed a long-term collaboration with Decisiv, the industry-leading provider of dealer Service Relationship Management (SRM) software for the dealer network
- As a result, TSPs and other software platform providers will increasingly rely on OEMs' connected data to **offer additional services**
- Subsequently, **partnerships** between TSPs and OEMs will increase
 - OEMs are positioning themselves to be an open platform-enabling data exchange (e.g. Navistar's partnership with Geotab, Samsara, Cloudera)
- OEMs are also aware that the future market will move in their favour once electrified powertrains become mainstream:
 - Service maintenance & repair will be performed by the OEM
 - The TCO will radically change, putting TSPs at a disadvantage in favour of OEMs' integrated telematics value proposal
 - TSPs are moving to software provision only (c.f. Gurtam, Fleetcomplete, etc)



Off-road OEMs are leveraging telematics programmes to boost after sales revenues for parts and maintenance

- Off-road OEMs currently hold a dominant position in the off-road market, accounting for approximately 78% of all active telematics services subscriptions
- The proprietary nature of engine diagnostics has led OEMs, such as John Deere, to provide **proprietary platforms** such as WorkSight™ and FarmSight™.
- The advent of **AEMP2.0** has caused these OEM platforms to now open further, enabling improved mixed fleet service provisioning
- OEMs are predominantly leveraging turn-key TSP solutions to boost **aftersales revenue** in the form of **parts and servicing**
- However, PTOLEMUS predicts that the “opening-up” of vehicle diagnostics will give the aftermarket an opportunity to grow its customer base by leveraging OEMs’ telematics APIs
- PTOLEMUS forecasts that active subscriptions in the aftermarket segment (including those connected to OEMs line-fitted devices) will grow at **32% annually through to 2030**
- This will be due to more equipment coming into the off-road area, pre-connected, and capable of providing a wider array of data directly to TSPs’ platforms in a more standardised format.
- In addition, machine owners, particularly in the North American agriculture sector, are pushing back against OEMs, **claiming the right to repair**:
 - The **Right to Repair (R2R) movement** is being heavily contested in the United States **between farmers and agricultural machinery manufacturers**
 - End-users are demanding the **legal right** to choose how their machinery is repaired, without the invalidation of warranties or the denial of access to diagnostics data
- Furthermore, OEMs such as AGCO will increasingly move to a fully **open model** cooperating with as many TSP providers as possible to provide the best service/ customer experience possible for end-users
- As a result of the technical and political forces at play, the need for third-party hardware will be negated, impacting TSP revenues, and enabling TSPs to focus on software provision, leveraging direct data feeds and providing competitive mixed-fleet services to end-users
- The outcome is that aftermarket revenues will grow with a **CAGR of 34% through to 2030**, and account for **€685 million (approximately 64%) of the global market**



PTOLEMUS Consulting Group

About PTOLEMUS



The first strategy consulting & research firm entirely focused on augmented mobility & automation

Strategy consulting services



Market research services



Fields of expertise

Mobility services	Car pooling Car sharing MAAS	Micro-mobility Ride hailing Shared mobility	Smart parking Tax refund
Vehicle services	bCall eCall FMS SVT / SVR	Tracking VRM In-car Wi-Fi Parking	Navigation Speed cameras Traffic information
New energies	BEV EV charging Fuel cards	Fuel cells Hydrogen	PHEV Vehicle-to-grid
Usage-based charging	Car As A Service Electronic Toll Collection	Mobility-as-a-Service RUC	UBI / PAYD Vehicle rental Vehicle leasing
Vehicle data & analytics	AI CAN-bus Crowd-sourcing Data protection	Driver safety OBD Predictive analytics	Remote diagnostics xFCD
Vehicle automation	ADAS Autonomous cars	Autonomous trucks	Robo-taxis Shuttles
Enabling technologies	Positioning (GNSS / WiFi / cellular) M2M / connectivity	Smartphones Sensors	Telematics devices V2X

We serve over 300 clients across the mobility ecosystem

Analytics, maps & applications providers



Automotive manufacturers & suppliers



Telematics solution providers



Mobile telecom players



Fleet & fuel, ITS & regulators



Device & location suppliers



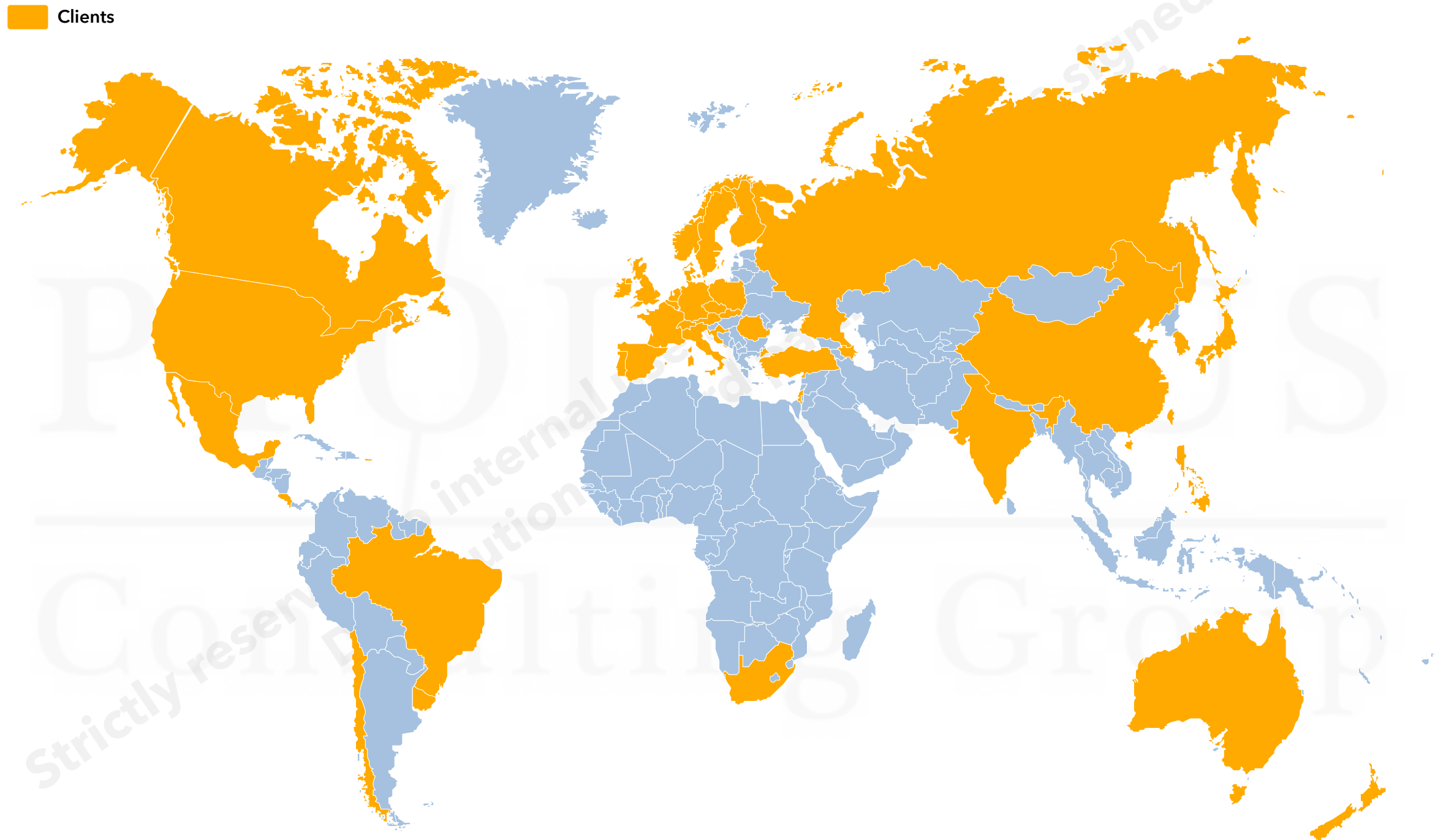
Insurers, aggregators & assistance providers



Banks & private equity investors



Our team of consultants, experts & analysts consisting of 16 nationalities helps our clients worldwide



PTOLEMUS can help your organisation define and achieve its fleet strategy in fast-moving times

- **Strategy definition**
 - Strategic plan
 - Market entry assistance
 - Data strategy and analysis
 - Connected vehicle / telematics strategy
 - Decarbonisation strategy
 - Strategy orientation workshops
- **Innovation strategy**
 - Fleet services convergence strategy
 - Telematics product definition
 - Consent management
 - Data analytics & monetisation strategy
- **Innovation delivery**
 - Proof of concept design & launch
 - Architecture definition
 - Project management
- **M&A advisory**
 - M&A strategy
 - Commercial due diligence
 - Technology due diligence
 - Feasibility studies
 - Fleet services market sizing
 - Business case development
 - Cost benefit analyses
 - Post-merger integration
- **Procurement**
 - Definition of EV migration strategy
 - Assistance with tenders
 - Selection and sourcing of fleet telematics, software, data, platform, etc.
- **Business development**
 - Partnership strategy definition
 - Assistance to tender response
- **Project management**
 - Assistance in management of decarbonisation plan
 - Congestion charge project management

The study comes with a single, worldwide company licence



The reference
report on commercial
fleet telematics for on-
road and off-road
vehicles

	Report ONLY		Additional market forecast	FULL Report & market forecast
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Contents	- A 632-page analysis of the global commercial fleet telematics landscape based on: 11 years of constant market surveillance - 26 interviews with key stakeholders 9 months of desk research - Granular analysis of telematics in on-road, construction and agriculture, including: - Cost structure, revenues and telematic needs of end users - Demand and supply analysis of current telematic solutions - Major players in telematic value chain and their strengths - An in-depth assessment of 40 companies engaged in commercial fleet telematics		- Excel file with outputs and charts 2020-2030 bottom-up market forecast encompassing: - The number of vehicles in use for both on-road fleet telematics and off-road fleet telematics - Subscriptions and revenues for the on-road telematics market, split by OEM and aftermarket - Subscriptions and revenues for the off-road telematics market, split by OEM and aftermarket - Regional projections for Europe, Americas, Asia Pacific, Africa and Middle East	Includes all report and market forecast content as described
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Avenue Louise 363

1050 Brussels

Belgium

contact@ptolemus.com

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PTOLEMUS

Consulting Group



fleet@ptolemus.com
www.ptolemus.com
@PTOLEMUS

Andrew Jackson
Research Director
ajackson@ptolemus.com
+44 7930 053 727