

## INSURANCE TELEMATICS



# The reference report on the future of motor insurance

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GLOBAL STUDY

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#### ABOUT PTOLEMUS CONSULTING GROUP



PTOLEMUS is the **first strategy consulting firm entirely focused on telematics and location-based services**.

We help our clients apply strategic analysis to this fast-moving ecosystem, across all its industries (consumer electronics, insurance, automotive, mobile telecoms, etc.) and on an international basis.

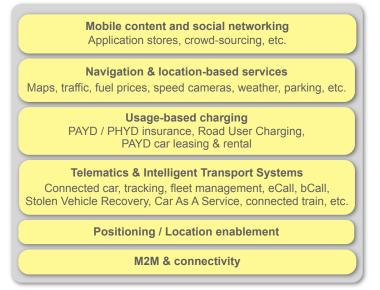
PTOLEMUS, founded by Frederic Bruneteau, operates across Europe and has Partners in Brussels, Paris, Munich, Milan and Boston.

It has also built a network of telematics specialists across the world to be able to analyse and address global mobility issues.

PTOLEMUS has performed multiple consulting and research assignments on insurance telematics.



#### Our fields of expertise



#### THE AUTHORS OF THIS STUDY

#### Frederic Bruneteau, Managing Director, Brussels (fbruneteau@ptolemus.com)



Mr. Bruneteau founded the PTOLEMUS Consulting Group on the conviction that pervasive location and connectivity would revolutionize the business of mobility. He has 17 years of experience in 12 countries with companies such as TomTom, SFR Vodafone, Arthur D. Little and BNP Paribas.

Mr. Bruneteau, who led the writing of this report, has performed several insurance telematics assignments, notably the due diligence of Octo Telematics. He also chaired the latest Insurance Telematics conference in London and Fleet & Asset Management Conference in Amsterdam.

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Sergio Tusa has gained over 20 years of experience in the telematics, locationbased services and automotive domains.

Before PTOLEMUS, Sergio held management responsibilities with Magneti Marelli (Fiat Group), Cobra Automotive, Nokia, Tele Atlas and Philips. He also created and led Geonext, the first LBS and fleet management service provider in Italy.

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He also chaired the latest Telematics Munich conference.

#### **OUR SINCERE THANKS**

The richness of a study is largely based on the willingness of the "outside world" to co-operate and give its time and knowledge for the benefit of the wider society and economy.

We would like to thank

- All persons who kindly accepted to respond to our questions. A list of the companies we interviewed is available on page 20;
- Our families for their patience and understanding;
- All companies that responded to our survey of technology solutions.

#### INTRODUCTION

Since the first Pay As You Drive experiment by Progressive Insurance in 1998, almost everything has changed in telematics. It has transformed into a fast growing model that all insurers worldwide must revisit.

How important is the emergence of telematics for the global motor insurance sector however?

In 2010, the European motor insurance market - the largest in the world - was worth an estimated  $\in$ 124 billion. Insurers paid out almost  $\in$ 100 billion in claims to car owners. By comparison, we estimate that its **telematics-enabled services market at**  $\in$ 5 billion, or 4% of the motor insurance market.

This highlights the contrast between a major but maturing sector of the economy and a burgeoning pocket of growth. This also clearly indicates that any take-up of telematics by insurers will have a major impact for telematics service providers and device makers.

Does the reverse hold true?

In this study, we respond by analysing whether telematics will change the motor insurance market and how profoundly it will impact it.

We assess the present state of insurance telematics in Europe and the challenges ahead. We also identify and propose solutions to overcome them. Last not but not least, we analyse the continuing evolution of the industry value chain and attempt to detect the winners and losers.

This report will provide **insights to insurers' management teams**, notably CEOs, CMOs, CIOs, Business Unit Directors and Directors in charge of risk management and claims management.

It will also interest assistance providers, automotive manufacturers, their tier-1 and tier-2 suppliers, telematics service providers (TSPs) and technology providers (TTPs), regulators and governments.

Our investigation also brings **responses** to the following questions:

- Is telematics necessary for insurers and what are its driving factors?
- What challenges remain and what actions must be taken by each party to face them?
- How can customer acceptance for these services be increased?
- How do the various telematic solutions available compare against each other?
- Which are the best suppliers for each type of solution and commercial target?
- How will the industry value chain evolve based on the actions of the principal agents?
- What is the business case for the mass introduction of PAYD/PHYD insurance?
- What is the expected market size for these products & services in the next 5 years?

To conduct what is the most comprehensive study ever written on insurance telematics, we have relied on

- Interviews with over 80 executives from all sides of the industry, from Allianz to Zurich,
- More than 2 years of desk research and primary research, notably a survey of available technology solutions,
- Building a simplified motor insurer's business model, with specific inputs for France, Germany, Italy and the UK,
- Building a 10-year forecast model of the European market so as to combine strategic and technology analysis with hard figures, and obviously,
- A review of applicable patents worldwide,
- Our existing experience in the field of insurance telematics.

This report will provide **a "one-stop-shop" analysis** of this complex business issue, across Europe and North America. The potential of other regions will also be assessed.

In our view, it is an **important read** for all insurers because

- The motor insurance market is facing structural losses due to heavy price competition and rising claim costs,
- Telematics-based insurance offerings will provide to insurers who launch them a competitive advantage, notably a better pricing of risk,
- The ITS directive and fast decreasing technology costs are paving the way for a mass-market launch,
- PTOLEMUS' analysis will help insurers learn from pioneers, overcome challenges, better understand the case for value-added services and make informed decisions,
- An examination of the present business models and value chain is needed to prepare the market for the next phase of growth,
- It compares the leading telematic solutions available to insurers.

It has been a pleasure for us to conduct this study. We hope that you will enjoy reading it. If you identify inaccurate information in our study, please let us know. We will correct it immediately. Your feedback will always be well received. If your company plays a role in this business and has not been mentioned in our report, please let us know so that we can update it in the coming months. Please send your **comments** to <u>insurance@ptolemus.com</u>.

Thank you very much.

Sincerely,

Frederic Bruneteau Managing Director

#### **EXECUTIVE SUMMARY**

What will you need to remember?

We have tried the impossible and summarised the study in the following 12 axioms.

- 1. After Italy, telematics-enabled insurance will gradually become mainstream in the US, the UK and all developed countries. Overall, telematics-enabled policies will generate more than €50 billion in premiums by the end of the decade.
- 2. In most countries, **first successful models will be launched by direct insurance start-ups or "natural born-innovators"** of the insurance world. As in the US, leading insurers will increasingly have no other option than following these.
- 3. In most markets, telematics will attract and retain the lowest risk drivers of each segment, offering them discounts of up to 50% on their premiums. Traditional offerings will increasingly be purchased by high-risk customers.
- 4. Stimulated by the gender ruling and upcoming regulation, telematics will revolutionise the way insurers assess drivers' risks. It will also force insurers to reinvent their business, notably by building a regular relationship with their customers, thereby reducing churn.
- 5. As seen in the US, governments and regulators will gradually turn positive towards telematics, notably to reduce the emissions of CO<sub>2</sub> and other car pollutants.
- 6. Professionally installed solutions will remain the leading technology to provide PAYD / PHYD solutions in Europe while OBD dongles will continue to dominate in North America.
- 7. This will drive a market for numerous value added services, notably bCall, eCall, stolen vehicle recovery, remote diagnostics, fuel management, etc.
- 8. EOBD solutions will emerge in Europe in 2013, notably in low premium markets. TSPs and insurers that ignore these will be at risk.
- **9.** The smartphone will become the next OBU of the insurance industry We expect it to emerge as a valid data probe within 2-3 years.
- 10. Numerous automotive OEMs will seize the eCall opportunity to make motor insurance a major part of their connected services business.
- 11. In the commercial segment, insurance telematics will be sold as **a component of larger fleet management solutions** by insurers but also TSPs, leasing companies, integrators, OEMs and other players.
- 12. **Privacy will need to be actively managed and transparent** by insurers. Otherwise, a public backlash against telematics could happen.

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#### FOOD FOR THOUGHT

"Adopting UBI [usage-based insurance] "We believe Snapshot is a game changer - representing sooner rather than later will not only attract better drivers willing to participate, but will also allow the future of auto insurance as carriers to build and maintain a database on our mobile and interconnected numerous variables that influence loss costs." world gives us the opportunity to offer immediate and substantial savings to our customers." Moody's Investor Service December 2011 MOODY'S Glenn Renwick "The voluntary pay-as-you-President & CEO, Progressive drive initiative is an innovative May 2011 program that will allow insurers to offer plans based on more "Privacy is for old people" accurate mileage, so that people Steve Poizner California Insurance who choose to drive less will pay Commissioner less for auto insurance" December 2010 Reid Hoffman CEO, LinkedIn January 2010 "Traditional car insurance relies on low mileage drivers "The combination of subsidising high mileage drivers. If you don't drive a lot, you pay for technology and a sustained the accidents of your high mileage neighbours. PAYD is a difficult programme of working with innovation for existing insurance companies to follow because of this drivers ... can help save lives subsidy system." on the roads, reduce costs and improve the working environment for drivers." Roger Grobler "I think in 5 years Chairman, Real Insurance every major insurer will September 2010 have a telematics Robert Gremli offering in their Chief Risk Engineering Officer, Zurich portfolio. I think PAYD / PHYD will November 2010 UK insurer October 2011 still be a relatively niche product and insurers will target particular segments like young drivers." "Everybody has a plan until they get punched in the face" "We have completely removed paper from the customer experience. Even the underwriting is Michel Lungart done through electronic signature" Mike Tyson. CEO, Amaguiz Professional boxer

December 2009

"Privacy is not just a

right...it's an emotion"

"At Wunelli, we have both PAYD & PHYD & claims data (both fault & non-fault) for over 15 000 devices now. The data is absolute gold.

We can how calculate the probability of a future fault accident from only 1000 miles worth of data."

2011



Paul Stacy

IT & Innovation Director, Wunelli

"Customers will only buy a product they are attracted to. One of the things the insurance industry continues to get wrong is that it designs products for itself and not the customer. Forget the actuarial stuff, what you need to do is design a product that customers want, that fits on price comparison sites, and that you can compare with a conventional product."

Mike Brockman CEO. Insure the box April 2011

Joseph Ferreira, MIT Professor Eric Minikel, IBI Group November 2010

"The data is compelling. This capability has really redefined the way we think about pricing auto. Insurers that don't use who were turned down for coverage by the insurers that do"



Simon Davies Privacy International January 2010

"Our data shows that the vast majority of our customers are responding to our 'carrot' rather than 'stick' approach and are improving their driving skills because they are rewarded for doing so. Our scheme is only in its infancy, but it is clear that if telematics was taken up on a larger scale it could be a major step forward in improving the safety on Britain's roads."

> David Neave, Director of General Insurance The Co-operative Insurance November 2011

French insurer February 2012

"This is clearly interesting but we will not be those that open and create the market"

"'We consider our motor insurance as the must have accessory that customers don't want and hope never to use (...) No one knows better how to repair a Volkswagen group vehicle than the Volkswagen group approved paint and body shop network, therefore they are at the heart of our proposition. So when a customer does make a claim on our insurance we can guarantee that their vehicle will be returned to factory standards, making our insurance the best accessory a customer will ever own or use."

> Robert Cottrell Head of Insurance Volkswagen Financial Services (UK)

Andy Napoli President, Consumer Markets Division The Hartford December 2011



telematics to price auto coverage will eventually attract poor drivers

"PAYD saves

money and is a more

accurate and fairer

method to price auto

insurance (...) PAYD

pricing reduces

inequities by

eliminating the

subsidies low-mileage drivers currently pay for

high-mileage drivers in the traditional pricing

system."

Sources: Insurance Daily, Real Insurance, Moody's, World Economic Forum, California Department of Insurance, News Assurances

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#### LIST OF COMPANIES INTERVIEWED AND MENTIONED IN THIS REPORT

As part of our research, we have held discussions with 83 organisations in 18 countries including

- 29 insurance companies,
- 17 Telematics Service Providers (TSPs),
- 8 Telematics Technology Providers (TTPs),
- 6 automotive Original Equipment Manufacturers (OEMs) and tier-1 suppliers.

We would like to **thank these organisations** for their precious contribution to this report. They are listed hereafter and will benefit from an extended free extract of the report and a discount on the <u>Full Study</u>.

We have also indicated the 280 companies that are mentioned in this report.

Company name	Country	Sector	Discussion	Mentioned
AA	UK	Automobile club		~
AAA Club Partners	USA	Automobile club		~
Accutek Ind.	USA	ODM		~
Achmea	Netherlands	General insurance	✓	~
ACI	Italy	Automobile club		~
ACTA	France	Roadside assistance provider		<b>v</b>
Assercar	France	Repair centres		~
ADAC	Germany	Automobile club		~
Admiral Insurance	UK	General insurance		~
Agero	USA	Automobile club / TSP		~
Aioi Nissay Dowa Insurance	Japan	General insurance		<b>v</b>
Airmax Group	UK	TSP	v	~
Aisin AW	Japan	Tier-1 supplier		~
Alcatel-Lucent	France	Telecom equipment vendor		~
ALD Automotive	France	Leasing company	v	v
Allianz	France	General insurance	<ul> <li>✓</li> </ul>	~
Allianz	Germany	General insurance	~	<ul> <li>Image: A start of the start of</li></ul>

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Company name	Country	Sector	Discussion	Mentioned
Allianz	Italy	General insurance	~	~
Allianz	UK	General insurance		~
Allstate Insurance	USA	General insurance		~
Alo@Assurances	France	Consumer insurance		~
Alpine	Japan	In-car audio equipment		~
Altech Netstar	South Africa	TSP		~
Altima Assurances	France	General insurance	~	~
Amadeus Capital Partners	UK	Private equity fund	~	~
Amaguiz (Groupama)	France	Consumer insurance	v	~
ANIA	Italy	Insurance trade association		~
ANWB	Netherlands	Automobile club		~
Aplicom	Finland	TSP/TTP	~	~
Apple	USA	Consumer electronics vendor		~
ARM Holdings	UK	Processor design vendor		~
Arval	France	Leasing company	v	
ASFA	France	Insurance trade association		~
Assicurazioni Navale	Italy	General insurance		~
Assurland.com	France	Online comparison site		~
Atmel	USA	Semi-conductors vendor		~
Atos	France	IT integrator		~
AutoDirect Insurance	UK	Consumer insurance		~
Aviva (formerly Norwich Union)	UK	General insurance	~	~
Аха	Belgium	General insurance	~	~
Axa Assistance	France	Roadside assistance provider	✓	ļ
Axa Matrix Risk Consultants	France	Commercial insurance	<i>v</i>	~
Barnes & Noble	USA	Book distribution chain		~
B&Q	UK	Restaurant chain		~
<b>BDI</b> (Bundes-beauftragte für den Datenschutz und die Informationsfreiheit)	Germany	Data protection authority		~
Best Buy	USA	Electronics retail chain		~
Bird & Bird	France	Law firm	<ul> <li>✓</li> </ul>	
Blockbuster	USA	Video rental chain		~
BluO Fund	Luxembourg	Private equity fund	~	~
BMW	Germany	Automotive OEM		~
Bouygues Telecom	France	Mobile operator	~	~
British Airways	South Africa	Airlines		~
BT Software & Research	USA	Telecommunications operator		~

Company name	Country	Sector	Discussion	Mentioned
Budget Insurance	UK	Personal line insurance		<b>v</b>
Bull	France	IT integrator		~
Cap Gemini	France	IT integrator		~
CEA	Belgium	Insurance trade association		~
<b>CEN</b> (European Committee for Standardisation)	Belgium	Standardisation organisation		~
CertEurope	France	Trusted third party services		<ul> <li></li> </ul>
Cesar Satellite	Russia	TSP	~	~
Cinterion	Germany	Connectivity module provider		<b>v</b>
CLAL Insurance	Israel	General insurance		~
Clarion	Japan	In-car audio equipment		<b>v</b>
<b>CNIL</b> (Commission Nationale de l'Information et des Libertés)	France	Data protection authority	~	~
Cobra Automotive	Italy	TSP	✓	<b>v</b>
Cobra Electronic Solutions	Italy	TTP	~	<ul> <li></li> </ul>
Compagnie Générale d'Automatisme (CGA HBS)	France	Engineering firm		~
Comparethemarket.com	UK	Online comparison site		v
Confused.com	UK	Online comparison site		~
Continental	France	Tier-1 supplier	<b>v</b>	
Corona Direct	Belgium	General insurance	~	<ul> <li></li> </ul>
COVEA Group	France	General insurance	✓	<b>v</b>
Coverbox	UK	Consumer insurance	<b>v</b>	<b>v</b>
Crédit Mutuel Arkea	France	Consumer insurance	v	
Cybit Masternaut	UK	TSP	~	<ul> <li></li> </ul>
Daimler Fleetboard	Germany	TSP		~
Daimler Insurance Services	Germany	OEM	<b>v</b>	<b>v</b>
Danlaw	USA	TTP	~	<ul> <li></li> </ul>
Data Tec Co Ltd	Japan	ODM		<b>v</b>
Davis Instruments	USA	TTP		<b>~</b>
DBV Winterthur	Germany	General insurance		<ul> <li>Image: A set of the set of the</li></ul>
Delphi	USA	Tier-1 supplier		~
Denso	Germany	Tier-1 supplier	<b>v</b>	<ul> <li>Image: A set of the set of the</li></ul>
Department of Transportation	USA	Government		<b>~</b>
Diamonds	UK	Insurance broker		<b>v</b>
Direct Line Germany	Germany	Consumer insurance		~
Discovery Insure	South Africa	Consumer insurance		v
Diva	UK	Insurance broker		<ul> <li>Image: A set of the set of the</li></ul>
Dixon's	UK	Consumer electronics retail chain		~

Company name	Country	Sector	Discussion	Mentioned
Drive Service	Italy	Repair & maintenance services	~	<ul> <li></li> </ul>
DriveCam	USA	TTP		~
Elmic Systems	USA	Embedded software		~
Equity Red Star	UK	General insurance		~
ERTICO - ITS Europe	Belgium	Trade association	~	
Europcar	South Africa	Vehicle rental		~
European Commission	Belgium	Government	~	~
European Court of Justice	Belgium	Government		~
Exigen	USA	Insurance software provider		~
F&I	USA	Magazine		~
Farmers Insurance	USA	General insurance		~
Fiat	Italy	Automotive OEM		~
Financial Times	UK	Newspaper		~
Fleet Logistics	UK	TSP		~
Fleetmatics / Sagequest	USA	TSP		~
FMSCA (Federal Motor Carrier Safety Administration)	USA	Government		~
Focus	Germany	Magazine		~
Foley & Lardner	USA	Law firm		~
Ford	USA	Automotive OEM		~
Fujitsu Ten	Japan	Automotive supplier		~
Garmin	USA	Electronics		~
GE Equipment Services	USA	Fleet management company		~
General Motors	USA	Automotive OEM		~
Generali France	France	General insurance	~	~
Generali Group	Italy	General insurance	v	~
Generali Group	Italy	General insurance	~	~
Genertel (Generali Group)	Italy	Consumer insurance		~
Geotab	USA	TSP		~
GirlMotor	UK	Insurance broker		~
GMAC Insurance	USA	Consumer insurance		~
Good Technology	USA	Mobile handset vendor		v
Google	USA	Search engine		~
Greenroad Technologies	USA	TSP		~
Groupama	UK	General insurance		~
Grupo Nacional Provincial	Mexico	General insurance		<b>v</b>
Harman	USA	Tier-1 supplier		~
High Point Auto Insurance	USA	Personal line insurance		<ul> <li></li> </ul>

Company name	Country	Sector	Discussion	Mentioned
Hitachi	Japan	Conglomerate		~
Hollard Insurance	South Africa	General insurance		<ul> <li>Image: A second s</li></ul>
Honda	Japan	Automotive OEM		<ul> <li>Image: A second s</li></ul>
Hughes Telematics	USA	TSP	V	~
HUK-Coburg	Germany	General insurance		~
Hyundai	South Korea	Automotive OEM		✓
Hyundai Mobis	South Korea	Tier-1 supplier		<ul> <li>Image: A second s</li></ul>
IBI Group	USA	Studies		~
IBM	USA	IT integrator		· · · ·
ID Macif	France	Consumer insurance		· · ·
IDM Trucking	USA			- 
iKube	USA	Transportation		•   
IMA	France	Consumer insurance Roadside assistance provider		
IMA	Canada	TSP	<i>v</i>	· ·
Industrial Alliance, Insurance and Financial Services Inc.	Canada	General insurance	·	~
Information Commissioner's Office	UK	Data protection authority		<ul> <li>Image: A second s</li></ul>
ING	Netherlands	Consumer insurance	~	
Innosurance	Australia	Commercial insurance		<ul> <li>Image: A second s</li></ul>
Insure the box	UK	Consumer insurance		<ul> <li>Image: A second s</li></ul>
Interactive Driving Systems	USA	Risk management solutions		~
International Road Union	Switzerland	Trade association		<ul> <li></li> </ul>
Intesa San Paolo Assicuri	Italy	General insurance		~
Iron Mountain	UK	Storage services		<ul> <li></li> </ul>
ISACA (Information Systems Audit & Control Association)	Worldwide	Trade association		~
lveco	Italy	Automotive OEM		✓
Ινοχ	USA	Risk management solutions		✓
Ixonos	Finland	Software developer		<ul> <li>Image: A set of the set of the</li></ul>
Jambit	Germany	IT integrator		<ul> <li>Image: A start of the start of</li></ul>
KDDI	Japan	Mobile operator		<ul> <li>Image: A second s</li></ul>
Kia Motors	South Korea	Automotive OEM		<ul> <li>Image: A second s</li></ul>
Kuantic	France	TTP		<ul> <li>Image: A second s</li></ul>
Ladybird	UK	Insurance broker		~
LG Electronics	South Korea	Consumer electronics vendor		<ul> <li>Image: A second s</li></ul>
Liberty Mutual	USA	General insurance		v
LinkedIn	USA	Social networking		<ul> <li>Image: A second s</li></ul>
Lysanda	UK	TTP	<b>v</b>	<ul> <li>Image: A second s</li></ul>

Company name	Country	Sector	Discussion	Mentioned
MAAF Assurances	France	General insurance		<b>v</b>
MACIF Assurances	France	General insurance	V	v
Magneti Marelli	France	Tier-1 supplier	<ul> <li></li> </ul>	v
MAIF Assurances	France	General insurance	v	V
Mapfre	Spain	General insurance	v	V
Markerstudy Group	UK	Consumer insurance		v
Marks & Spencer	UK	Retail		v
Masternaut	France	TSP	<ul> <li></li> </ul>	v
MATMUT Assurances	France	General insurance		<b>~</b>
Mercedes Benz	Germany	Automotive OEM		<b>~</b>
Meta System	Italy	TTP		~
Metaskil	UK	Software developer		~
Michelin	France	Tyre manufacturer	<b>v</b>	
MileMeter	USA	Consumer insurance		<i>v</i>
Mitsubishi Electric	Japan	Conglomerate		~
Mobile Devices	France	TTP	~	~
Mobileye	Israel	TTP		<i>v</i>
Montezemolo & Partners	Italy	Private equity fund		v
Moody's	USA	Rating agency		<b>v</b>
MORE TH>N	UK	Consumer insurance		<b>v</b>
Motaquote	UK	Consumer insurance		~
Motorola Mobility	USA	Mobile phone vendor		<ul> <li>Image: A start of the start of</li></ul>
Nationwide Insurance	USA	General insurance		~
Navteq	France	Map provider	v	~
ND a Islandi Ehf	Island	n.a.		~
News of the World	UK	Newspaper		v
NIS Glonass	Russia	Public-private partnership		v
Nokia	Finland	Mobile phone vendor		~
Norton Rose	UK	Law firm	<ul> <li></li> </ul>	
Norwegian Biotronics	Norway	n.a.		v
Novacom Europe	Netherlands	TSP		v
NXP	Netherlands	Chipset vendor	<ul> <li>Image: A start of the start of</li></ul>	~
ÖAMTC	Austria	Automobile club		~
Octo Telematics	Italy	TSP	<b>v</b>	~
Oracle	USA	Enterprise resource planning software		<i>v</i>
Orange	UK	Mobile operator		<b>v</b>

Company name	Country	Sector	Discussion	Mentione
Orange Business Services	France	Integrator / TSP	✓	~
ÖSA (Öffentlichen Versicherungen Sachsen-Anhalt)	Germany	General insurance		V
Panasonic	Japan	In-car electronics		~
PHS Datashred	UK	Business services		<b>v</b>
Pioneer	Japan	In-car electronics		<b>v</b>
Polis Direct	Netherlands	Consumer insurance		~
Privacy International	UK	Non-governmental organisation		~
Progressive Insurance	USA	Consumer insurance		~
PSA Peugeot Citroën	France	Automotive OEM	~	~
Punch Telematix	Belgium	TSP		~
QNX	Canada	Embedded software		~
Qualcomm Enterprise Services	Netherlands	TSP	<b>v</b>	~
Quality Planning	USA	Insurance services		~
RAC	UK	Automobile club		~
RACE	Spain	Automobile club		~
<b>RBS Insurance</b>	UK	General insurance		~
Real Insurance	Australia	Consumer insurance		~
Reala Mutua	Italy	General insurance		~
RealVNC	UK	Embedded software		~
RelayRides	USA	Car sharing provider		~
Renault	France	Automotive OEM		~
Renault Trucks	France	Automotive OEM		~
Renesas	USA	Semiconductors		V
Robert Bosch	Germany	Tier-1 supplier		~
Rosno (Allianz Group)	Russia	General insurance		~
Royal & Sun Alliance	UK	General insurance		~
Safeco	USA	General insurance		~
SageQuest	USA	TSP		
Samsung	South Korea	Consumer electronics vendor		~
SAP AG	Germany	Enterprise resource software	v	~
Sara	Italy	General insurance		~
Scania	Sweden	Automotive OEM		~
Scope Technologies	Singapore	TSP/TTP	~	~
Second Opinion Financial Systems	USA	Software developer		~
Seesam	Latvia	General insurance		~
Sensomatix	Israel	Data management	~	~

Company name	Country	Sector	Discussion	Mentioned
SFEREN	France	General insurance		~
Sheila's Wheels	UK	Insurance broker		~
Sierra Wireless	Canada	Connectivity module provider		<b>v</b>
SiRF (CSR Group)	UK	Chipset vendor		<b>v</b>
Skymeter	Canada	TTP	~	<ul> <li>Image: A start of the start of</li></ul>
SmartDrive	USA	TTP		v
Société Générale	France	Bank		~
Solly Azar (Verspieren Group)	France	Insurance broker	~	<b>v</b>
Sony	Japan	Consumer electronics vendor		v
Sony Ericsson	Japan	Mobile phone vendor		<b>~</b>
Standard & Poor's	France	Rating agency	✓	<b>v</b>
State Farm Insurance	USA	General insurance		<b>v</b>
Stellar International	Ireland	n.a.		~
Stok Nederland	Netherlands	TSP	v	
T-Mobile	Germany	Mobile operator		<b>v</b>
TCS	Switzerland	Automobile club		<b>~</b>
Telefonica	Spain	Mobile operator		v
Telenav	USA	Navigation / MRM provider		v
Teletrac	USA	TSP		v
Telit	Italy	Connectivity module provider	~	v
Telogis	USA	TSP	~	<ul> <li>✓</li> </ul>
Test-Achats	Belgium	Consumer rights organisation		<ul> <li></li> </ul>
Теха	Italy	TTP	~	~
Thatcham	UK	Certification company		<ul> <li></li> </ul>
The Carphone Warehouse	UK	Telecommunications retail		~
The Co-operative Insurance	UK	General insurance	<b>v</b>	~
The Hartford	USA	General insurance		~
The Sun	UK	Newspaper		~
The Wall Street Journal	USA	Newspaper		~
Tiger Wheel & Tyre	South Africa	Tyre fitment centre		~
Tokio Marine Risk Consulting	Japan	Risk consulting firm		~
Toll Collect	Germany	Road charging provider		~
TomTom Business Solutions	Netherlands	TSP	<ul> <li></li> </ul>	~
Touring	Belgium	Automobile club	<ul> <li></li> </ul>	~
Toyota	Japan	Automotive OEM	v	~
Toys'R Us	South Africa	Games stores		V
Tracker	South Africa	TSP	~	~
Tracker Network (UK)	UK	TSP		~

Company name	Country	Sector	Discussion	Mentioned
Trafficmaster	UK	TSP		~
Transics	Belgium	TSP		<ul> <li></li> </ul>
Travelers Insurance	USA	General insurance		v
Trimble MRM	USA	TSP	~	v
uBlox	Switzerland	Chipset vendor		~
UGF Group	Italy	General insurance		v
Unipol	Italy	General insurance		v
Uniqa	Austria	General insurance	~	~
US Bank	USA	Bank		~
Valeo	France	Tier-1 supplier		<ul> <li>Image: A set of the set of the</li></ul>
Vanguard plc	UK	Mobile phone retailer		~
Vector Capital	USA	Private equity firm		~
Verisk Insurance Solutions	USA	Software developer		<b>v</b>
Vivium (P&V Group)	Belgium	General insurance	~	<ul> <li></li> </ul>
Vodafone	UK	Mobile operator	~	<ul> <li>Image: A start of the start of</li></ul>
Volkswagen	Germany	Automotive OEM		~
Volkswagen Financial Services (UK)	UK	Financial services		<b>v</b>
Volvo Cars	Sweden	Automotive OEM		~
Volvo Trucks	Sweden	Automotive OEM		<b>v</b>
Wireless Car	Sweden	TSP	~	
Wunelli	UK	TSP	~	<b>v</b>
Xirgo Technologies	USA	TTP	~	✓
Young Marmalade	UK	Consumer insurance	~	~
Zurich	Italy	Consumer insurance	~	ĺ
Zurich	UK	Consumer insurance	~	İ
Zurich Financial Services	France	Commercial insurance	~	<b>v</b>
Zurich Fleet Intelligence	UK	Commercial insurance	~	✓

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#### Disclosure

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