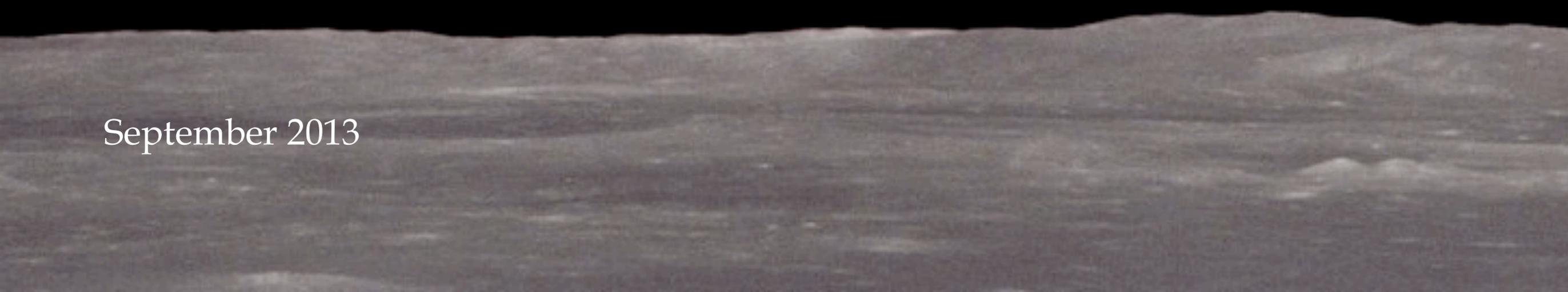


PTOLEMUS Consulting Group

Usage-based Insurance Global Study 2013

The reference report on Telematic Insurance

September 2013



PTOLEMUS is a strategic consulting firm focused on the connected vehicle and LBS markets

Our consulting services

Strategy definition

New market entry
Business plan development,
board coaching and support

Investment Evaluation

Due diligence
Market assessment
Feasibility studies

Procurement strategy

Specification of requirements,
launch of tenders,
supplier negotiation & selection

Innovation management

Product & services development,
roadmap definition,
project management & launch, patent strategy

Business development

Partnership strategies,
response to RFPs,
lobbying

Implementation

Project & programme management, risk analysis & mitigation strategy

Our fields of expertise

Mobile content and social networking

Application stores, crowd-sourcing, etc.

Navigation & location-based services

Maps, traffic, fuel prices, speed cameras, parking, etc.

Usage-based charging

PAYD / PHYD insurance, Road User Charging, PAYD car leasing & rental

Telematics & Intelligent Transport Systems

Connected car, tracking, fleet management, eCall, bCall, Stolen Vehicle Recovery, Car As A Service, connected train, etc.

Positioning / Location enablement

M2M & connectivity

We have already helped a wide range of actors in the connected vehicle and insurance sectors

Telecom operators



OEMs & telematics vendors



Content & application providers



Telecom infrastructure providers



Consumer electronics makers



Positioning solution providers



PTOLEMUS Consulting Group

- Partners in Brussels, Paris, London, Hamburg and Milan
- +50 years of experience in mobile
- +100 years of experience in telematics

ITS operators & regulators



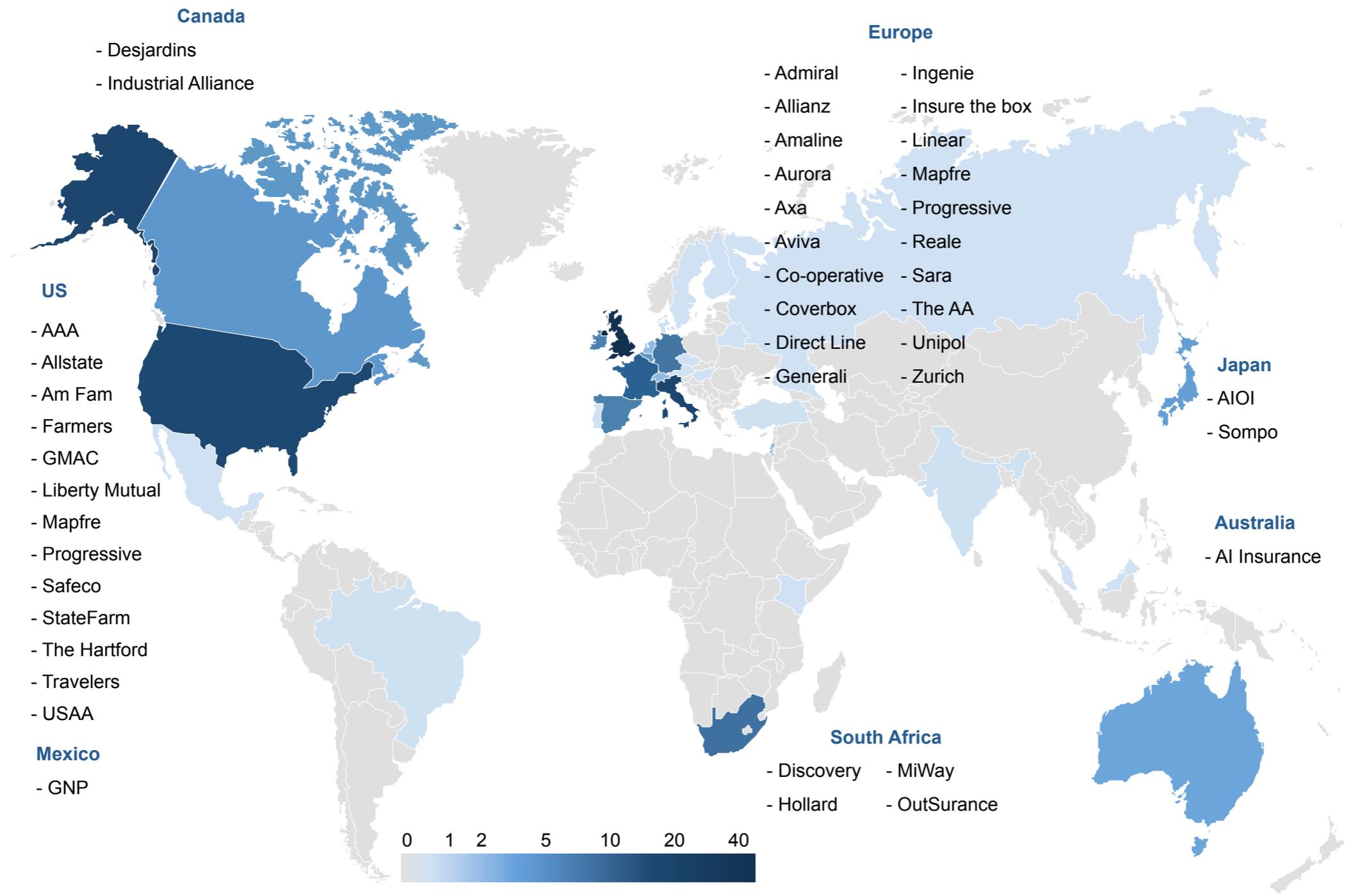
Insurers & assistance providers



Financiers

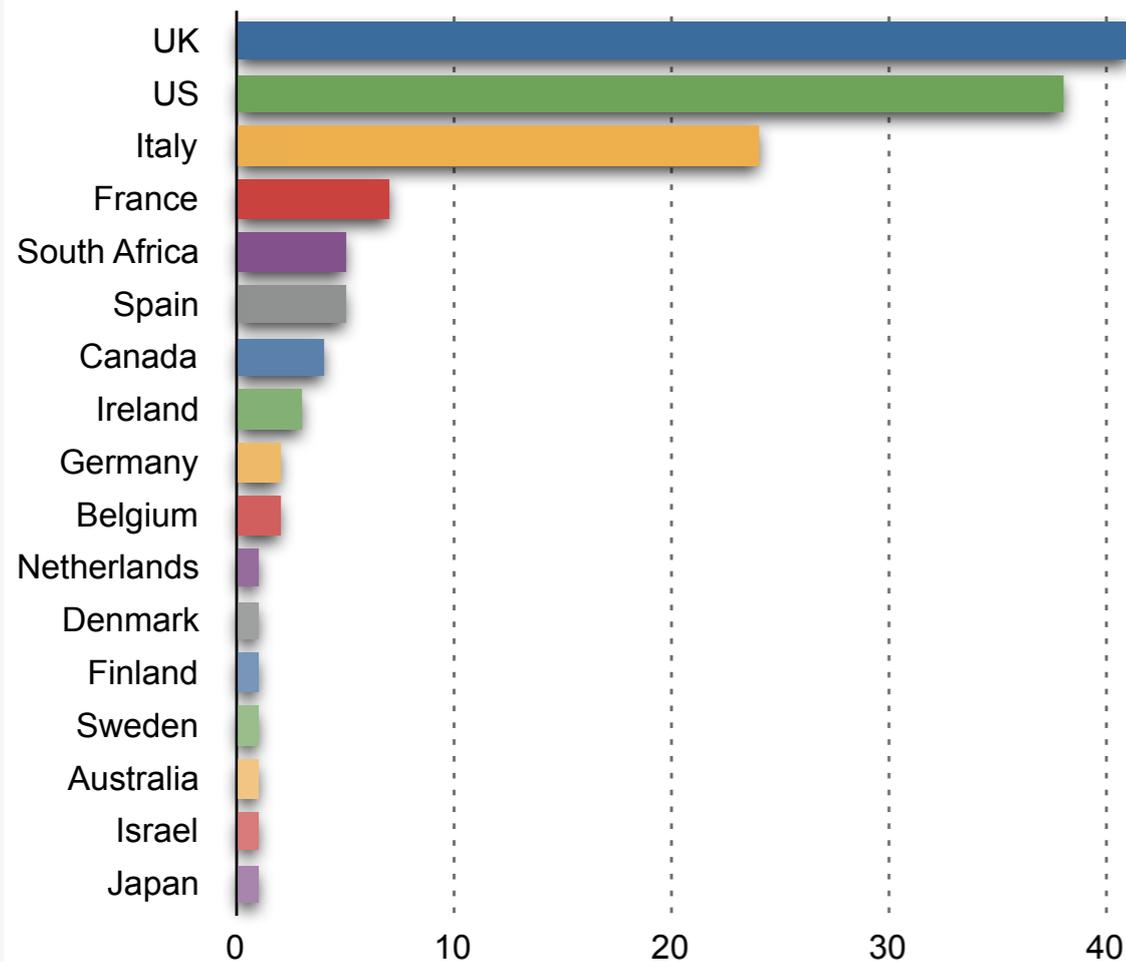


The market for telematics insurance is now global



The number of trials and services has doubled since last year

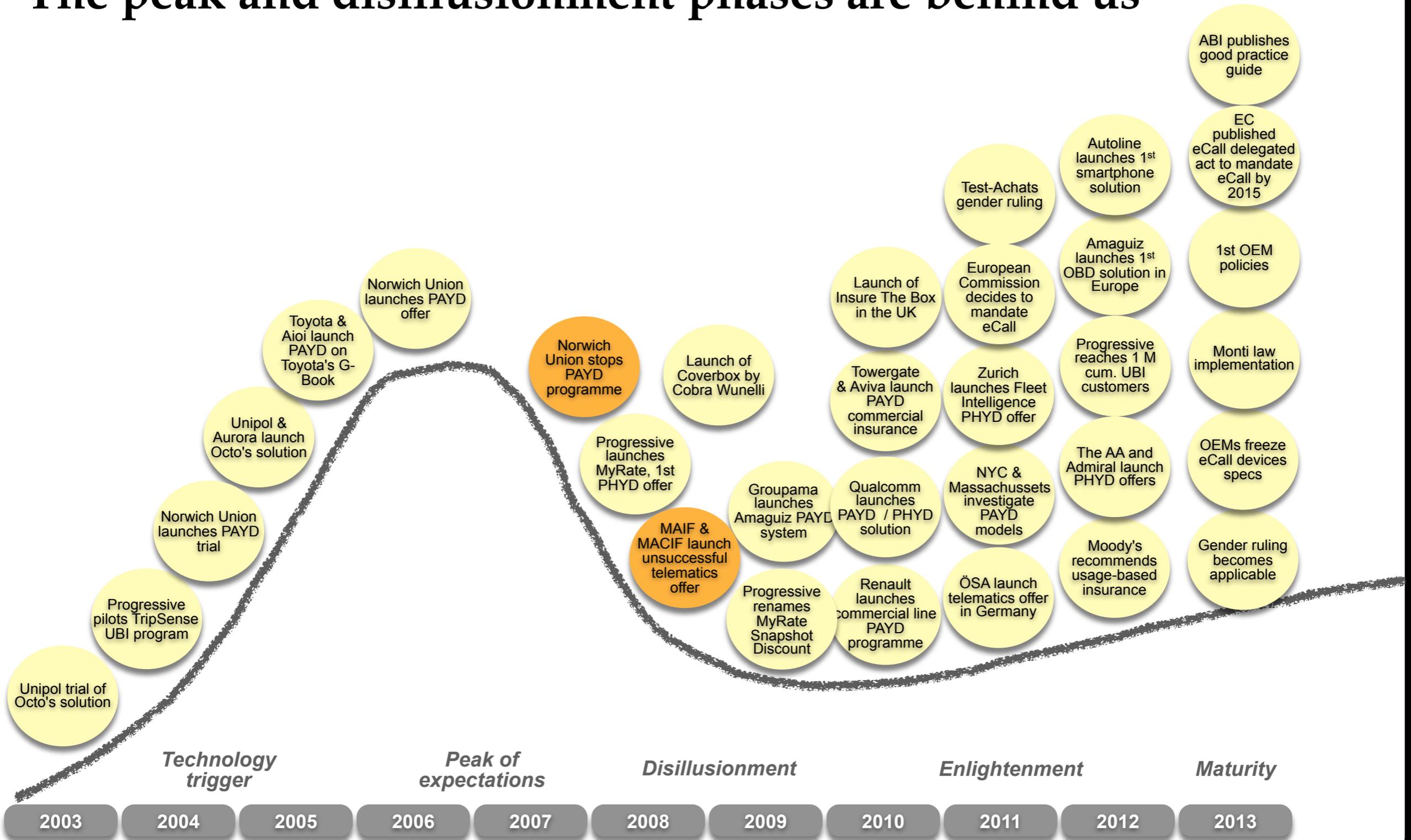
We counted 130 UBI trials & launches



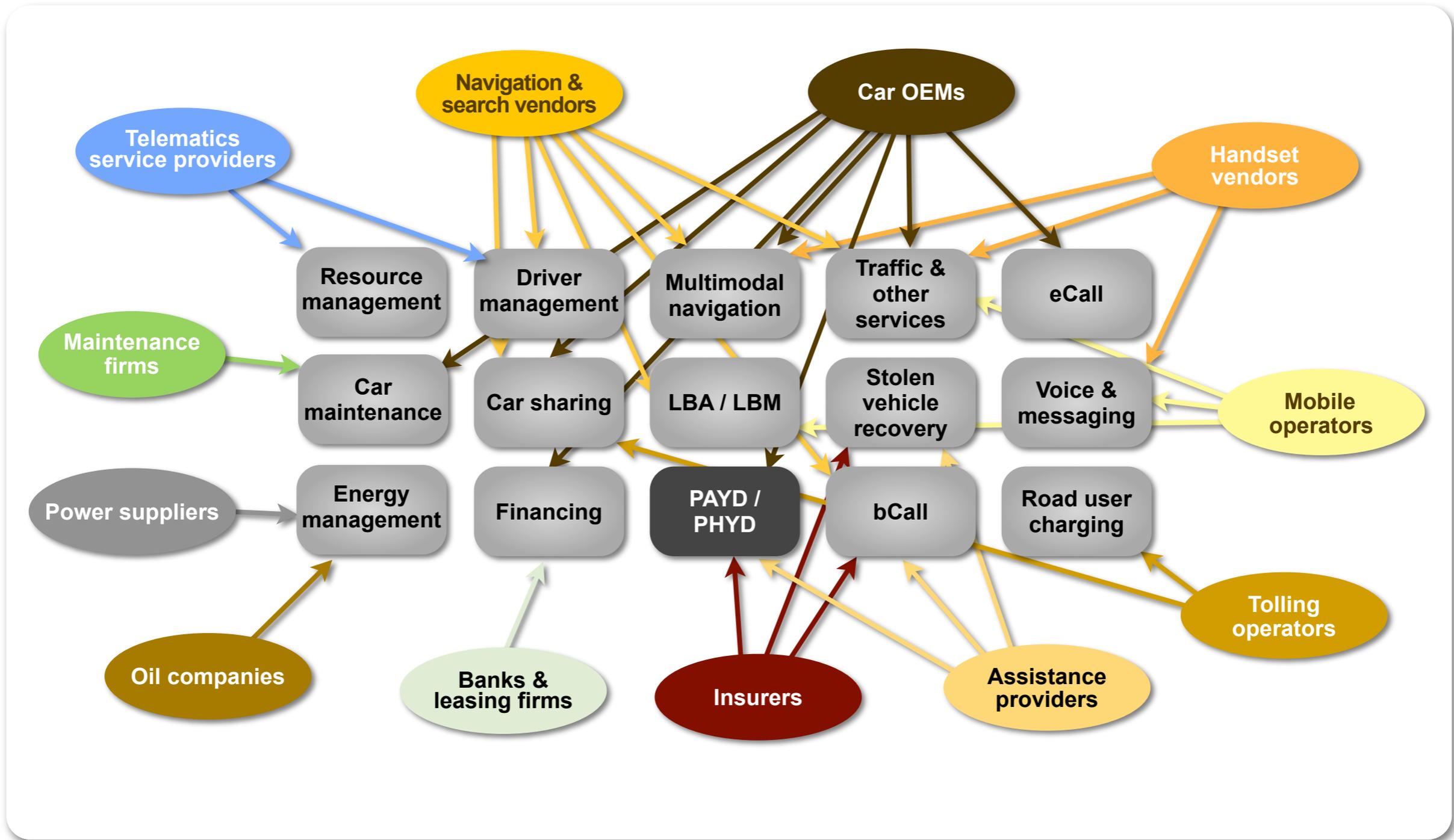
The trial phase is now over

- 53 trials worldwide (83% in PAYD)
- 112 programmes launched (95 in the consumer line)
- **Success stories in multiple countries**, notably Italy (Unipol), Spain (Mapfre), Canada (Industrial Alliance, Desjardins), the UK (Insurethebox, Co-operative), Austria (Uniq) and the US (Progressive & State Farm)
- Overall, we estimate **UBI policies at 5 million** (worldwide)

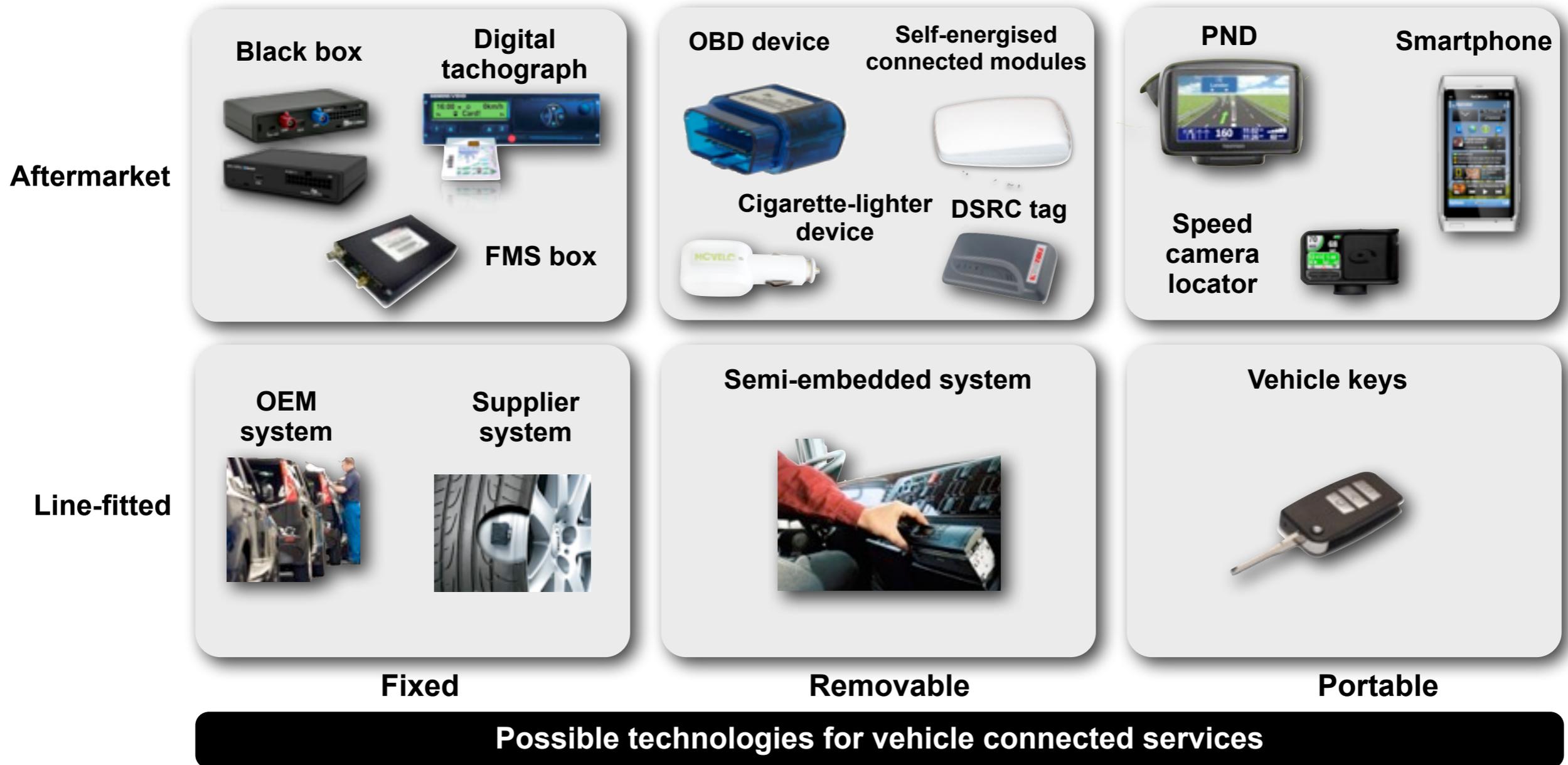
The peak and disillusionment phases are behind us



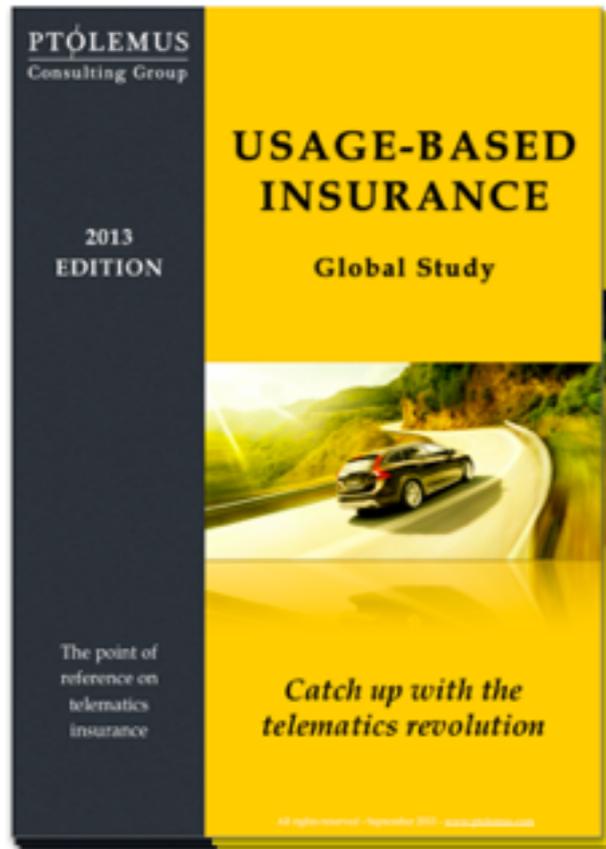
New players are entering the connected vehicle services battle



The variety of devices used is growing



To make sense of its challenges and opportunities we painted a truly comprehensive picture of the UBI market



More than a research report, a real strategic market analysis

- **770 pages of rigorous analysis of the PAYD / PHYD market based on**
 - 201 interviews in 18 countries
 - 330 figures and charts
 - 3 years of hands-on experience
 - Our knowledge of the ecosystem incl. OEMs and TSPs
- **38 case studies** including Allianz, Amaguiz, Cobra, Coverbox, Insurethebox, Ingenie, OnStar, Hollard Insurance, Insurethebox, Liberty Mutual, MAIF-MACIF, Norwich Union, Octo Telematics, Progressive, Quindell, State Farm, Unipol, Uniq, Zurich
- **A strategic analysis of the value chain evolution** including
 - The impact of eCall
 - The role of the smartphone
 - The new patents and partnerships
- **A handbook of 45 suppliers' solutions** including our own evaluation & ranking
- **10-year market forecasts**
 - Country forecasts for Canada, China, France, Germany, India, Italy, Japan, Russia, South Africa, the UK and the US
 - Bottom-up estimates of the number of policies for each insurer in the US, the EU and in South Africa
- **Telematic insurer market models**
 - Markets' readiness to UBI for 20 countries
 - The analysis* of the insurer's business model in 6 countries
- **A complete set of recommendations** to insurers, regulators, TSP, OEMs and operators

The authors of this report combine 60 years of experience in the automotive, telematics and connected services

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



Mr. Bruneteau founded the PTOLEMUS Consulting Group on the conviction that pervasive location and connectivity would revolutionise the business of mobility.

He has 18 years of experience in 12 countries with companies such as **TomTom, SFR Vodafone, Arthur D. Little and BNP Paribas.**

Mr. Bruneteau has performed a **dozen assignments on insurance telematics**, notably the due diligence of **Octo Telematics** and the definition of an international UBI strategy & business plan for a large insurance group.

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Mr. Noël has gained 4 years of consulting experience primarily helping clients in the automotive sector such as **BMW, PSA Peugeot-Citroën, Renault-Nissan and Faurecia.**

He recently built a 10-year market forecast model of 14 different connected services in Europe.

Sergio Tusa, Associate Partner, Milan (stusa@ptolemus.com)



Sergio Tusa has gained over 20 years experience in the telematics, location-based services and automotive domains.

Before PTOLEMUS, Sergio held management responsibilities with **Magneti Marelli (Fiat Group), Cobra Automotive, Nokia, Tele Atlas and Philips.**

He has led several insurance telematics and stolen vehicle recovery projects, for clients such as Cobra, Ferrari, Fiat and Renault/Volvo Trucks.

Thomas Hallauer, Director of Research & Marketing, London (thallauer@ptolemus.com)



Thomas Hallauer has gained 10 years of marketing experience in the domain of telematics and location-based services. He is an expert in new products and services notably in the automotive, motor insurance, navigation & location industries.

Before PTOLEMUS, Thomas held management responsibilities with **Mobile Devices**, a leading provider of telematic technology platform and devices.; and for **FC Business Intelligence (Telematics Update).**

770 pages of facts, figures, examples, case studies, analysis, forecasts and recommendations

This is just a sample of the 4 first chapters of the study

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We have interviewed more than 200 companies in 18 countries including 80 insurers & brokers

Organisation	Country
AAA Club Partners	USA
Achmea	Netherlands
ADAC	Germany
Admiral France - L'Olivier Assurances	France
Admiral Insurance	UK
Ageas Continental Europe	Global
Agnik	USA
AIG	UK
Aioi Nissay Dowa Insurance	Japan
Airmax Group	UK
ALD Automotive	France
Allianz	France
Allianz	Germany
Allianz	Italy
Allianz	Switzerland
Allstate Insurance	USA
Altima Assurances	France
Amadeus Capital Partners	UK
Amaguiz (Groupama)	France
American Family	USA
AnyDATA Corporation	USA
Apicom	Finland
Arval	France
Association of British Insurers	UK
Atos	France
ATrack Technology	Taiwan
Audiovox	USA
Autoline	UK
Autosaint (Fresh! Insurance Group)	UK
Aviva (formerly Norwich Union)	UK
Axa Assistance	France
Axa Belgium	Belgium
Axa Global P&C	France
Axa Matrix Risk Consultants	France
Axa Re	France
Axa UK	UK
Baseline telematics	Canada
BGL Group Ltd	UK
Bird & Bird	France
BluO Fund	Luxembourg

Organisation	Country
BMW	Germany
Bouygues Telecom	France
Cambridge Mobile Telematics, Inc.	USA
Carrot Insurance	UK
Cellocator (Pointer Telocation)	Israel
Cesar Satellite	Russia
CINVEN	UK
CNIL (Commission Nationale de l'Information et des Libertés)	France
Cobra Automotive	Italy
Cobra Electronic Solutions	Italy
Cognizant	USA
Confused.com	UK
Continental	France
Corona Direct	Belgium
Corporate Vehicle Observatory	France
COVEA Group	France
Coverbox	UK
Coverhound	USA
Crédit Mutuel Arkea	France
Ctrack (Digicore)	South Africa
Cybit Masternaut	UK
Daimler Insurance Services	Germany
Danlaw	USA
Davis Instruments	USA
Denso	Germany
Detector	Spain
Deutsch Telekom	Germany
Discovery Insure	South Africa
Drive Service	Italy
DriveCam	USA
DriveFactor	USA
DriveProfiler	Global
Earnix	USA
Equity Red Star	UK
ERTICO - ITS Europe	Belgium
European Data Protection Supervisor (EDPS)	Belgium
European Commission	Belgium
Fédération Internationale de l'Automobile (FIA)	Belgium
FMG	UK
Generali France	France

Organisation	Country
Generali Group	Italy
Generali Group	Italy
Geotab	USA
gocompare.com	UK
Hastings Direct	UK
HDI-Gerling Industrial Insurance Co	Global
Himex	USA
Hollard Insurance	South Africa
HopeRun Technology	USA
Hughes Telematics	USA
iGo4	UK
iMetrik Global	USA
IMS	Canada
Industrial Alliance, Insurance and Financial Services Inc.	Canada
ING	Netherlands
Ingenie	UK
Intellimec IMS	Canada
IVOX	USA
KKR	UK
Leaseplan	UK
Liberty Mutual	USA
LocX	USA
Lysanda	UK
MACIF Assurances	France
Magneti Marelli	France
Magneti Marelli	USA
MAIF Assurances	France
Mapfre	Spain
Market IP	Belgium
Marmalade Group	UK
Masternaut	France
Masternaut	UK
Meta System	Italy
Michelin	France
Mix Telematics	South Africa
Mobile Devices	France
Money Super Market	UK
Movelo	Sweden
MyDrive Solutions	UK
Navteq	France

Organisation	Country
Nissan	USA
Nononsense Insurance	Ireland
Norton Rose	UK
NXP	Netherlands
OBD Experts	UK
Octo Telematics	Italy
OECD	France
Orange Business Services	France
Orion Technology	Taiwan
Osborne Clarke	Global
PayGo Systems	Israel
Plymouth Rock	USA
Progressive Insurance	USA
PSA Peugeot Citroën	France
Qualcomm Enterprise Services	Netherlands
Quanta	Brazil
Quindell Portfolio	Global
RAC	UK
Redtail Plextek	UK
Renault	France
RS Fleet Installations	UK
RX Networks	Canada
Safeco	USA
Sanford Bernstein	USA
SAP AG	Germany
SAS Institute	USA
Scope Technologies	Singapore
Sensomatix	Israel
Skymeter	Canada
Solly Azar (Verspieren Group)	France
SOMPO Research Institute	Japan
Sprint Nextel	USA
SSP	USA
Standard & Poor's	France
State Farm Insurance	USA
Stok Nederland	Netherlands
T-Matic	Poland
Tapiola	Finland
Telefonica digital	Spain
Telefonica UK	UK

Organisation	Country
Telekom Austria Group	Austria
Telenor Connexion	UK
Telit	Italy
Telogis	USA
Teradata Aster	USA
Texa	Italy
The AA	UK
The Co-operative Insurance	UK
The Floom	UK
The Hartford	USA
TomTom	Netherlands
TomTom Business Solutions	UK
Touring	Belgium
Toyota	Belgium
Toyota Insurance Management	Belgium
Toyota Insurance Management	UK
Trac Global	UK
Tracker	South Africa
Traqueur	France
Trafficmaster	UK
Transics	Belgium
Travelers Insurance	USA
Trimble MRM	USA
TRL	UK
Uniq	Austria
Uralsib	Russia
US Department of Transport	USA
Vehcon	USA
Verizon Telematics	USA
Viasat	Italy
Vivium (P&V Group)	Belgium
Vodafone	UK
Volvo Cars	Sweden
Wireless Car	Sweden
Wunelli	UK
Xirgo Technologies	USA
Young Marmalade	UK
Zurich	Italy
Zurich	UK
Zurich Financial Services	France

Over 330 charts, diagrams, illustrations and tables

Breakdown of telematics policies by technology in North America - Commercial line market

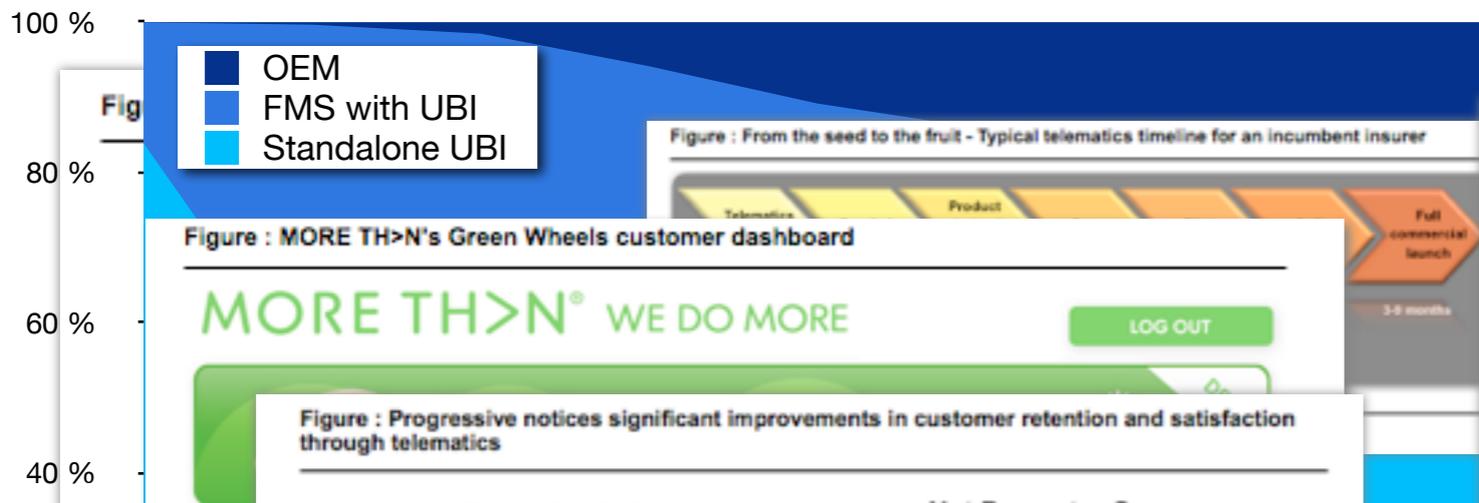


Figure : Learnings for insurers

Insurer	Factors of failure	Success factors	Customers acquired per year
	<ul style="list-style-type: none"> * Upfront fees for the device and the installation * Complex tariffing scheme 	<ul style="list-style-type: none"> * Technical trial 	

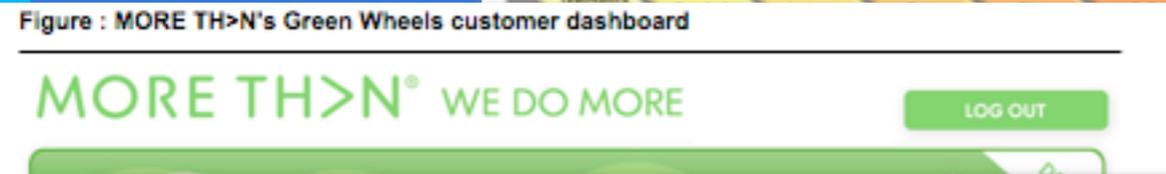
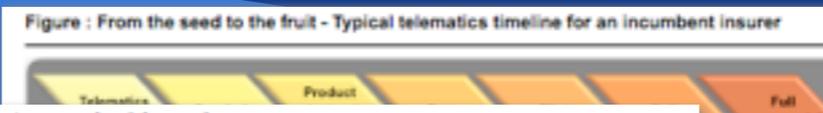
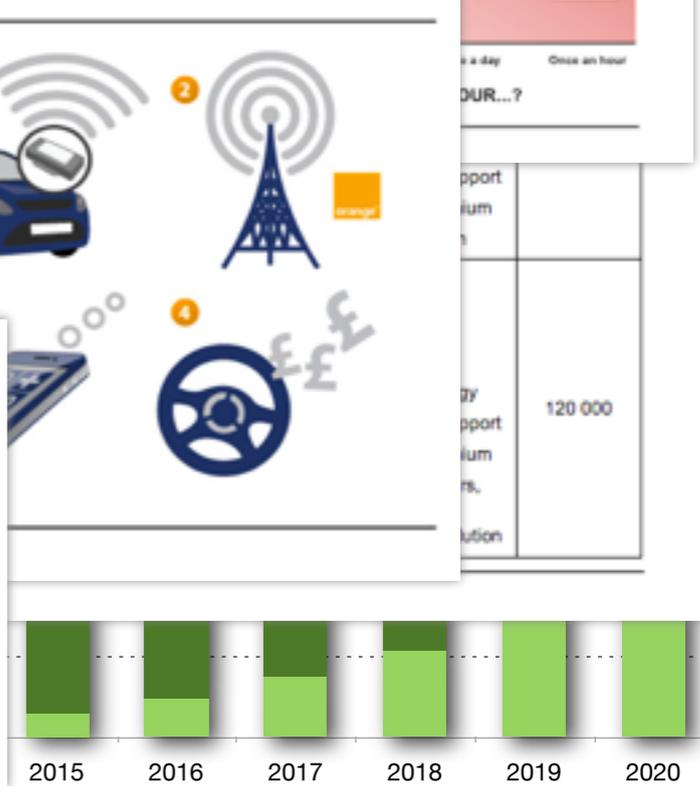
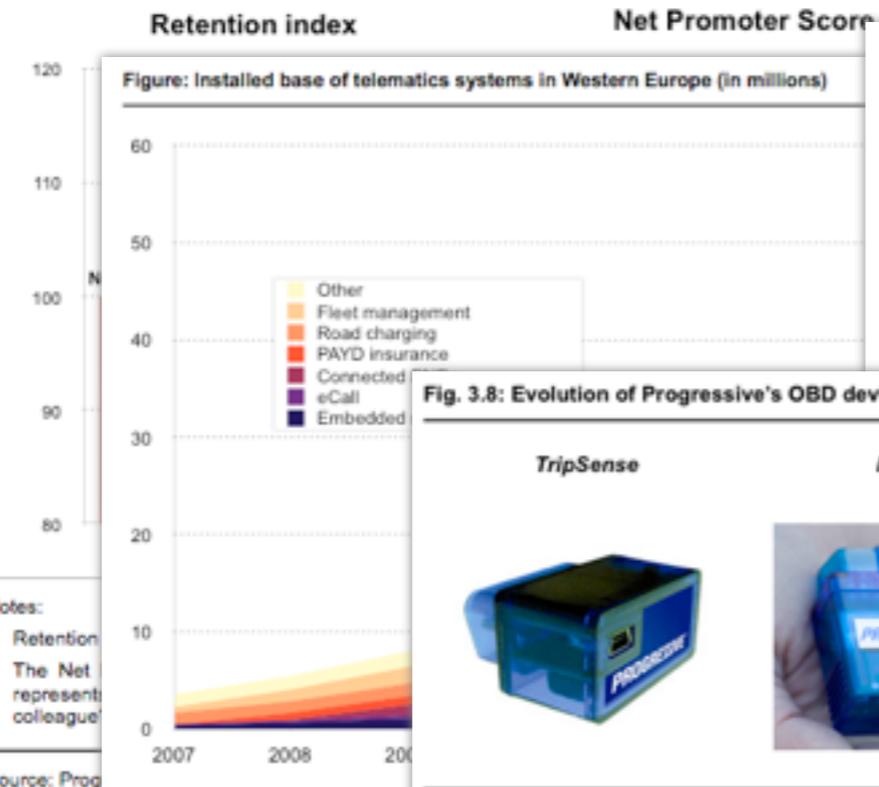


Figure : Progressive notices significant improvements in customer retention and satisfaction through telematics



A detailed evaluation and presentation of 43 suppliers

Rankings of the telematics suppliers per region

Last year's winners!

	Personal line	Commercial line
Europe	Mobile Devices	Aplicom
North America	Danlaw	Mobile Devices
Other continents	Scope	Mobile Devices

The most complete analysis of UBI solutions

- 70-page analysis of technology solutions and purchasing strategies
- 100-criteria purchasing checklist
- Market shares of suppliers globally
- An analysis of the differentiating features and services
- A list of 58 applicable patents
- OBD vs. Black Box vs. Mobile vs. Hybrid

Over 40 TTP and TSP profiles

The image displays several overlapping documents from PTOLEMUS Consulting Group. Visible documents include:

- Global Handbook 2013**: A comprehensive overview of the market.
- SECTION III PLAYERS PROFILE**: Detailed profiles of suppliers, including technical specifications and service offerings.
- SECTION IV - BUILDING THE TECHNOLOGY SOLUTION**: A checklist of factors and services to consider when evaluating solutions.
- Company Profiles**: Specific reports for suppliers like Danlaw and Cobra, detailing their history, technology, and market presence.

A quick access reference guide of the biggest UBI programmes worldwide

Profiles and assessment of 24 insurers

- Complete picture of the size, profitability and deployment
- Mapped out geographical rollout
- Major events and successes listed
- Ranking of insurers based on their experience, number of customers, the range of the offering, etc.
- Models and discounts compared
- Partners and suppliers disclosed



A worldwide comparison of the key geographical markets

20 countries analysed in depth

- Critical rating data includes
 - Gross written premiums,
 - Number of policies,
 - Cost of claims,
 - Loss and expense ratios
- Influential economic parameters analysed
- Environment factors presented such as:
 - Vehicle density,
 - Theft rate or
 - Cultural factors



The legal landscape explained by legal experts

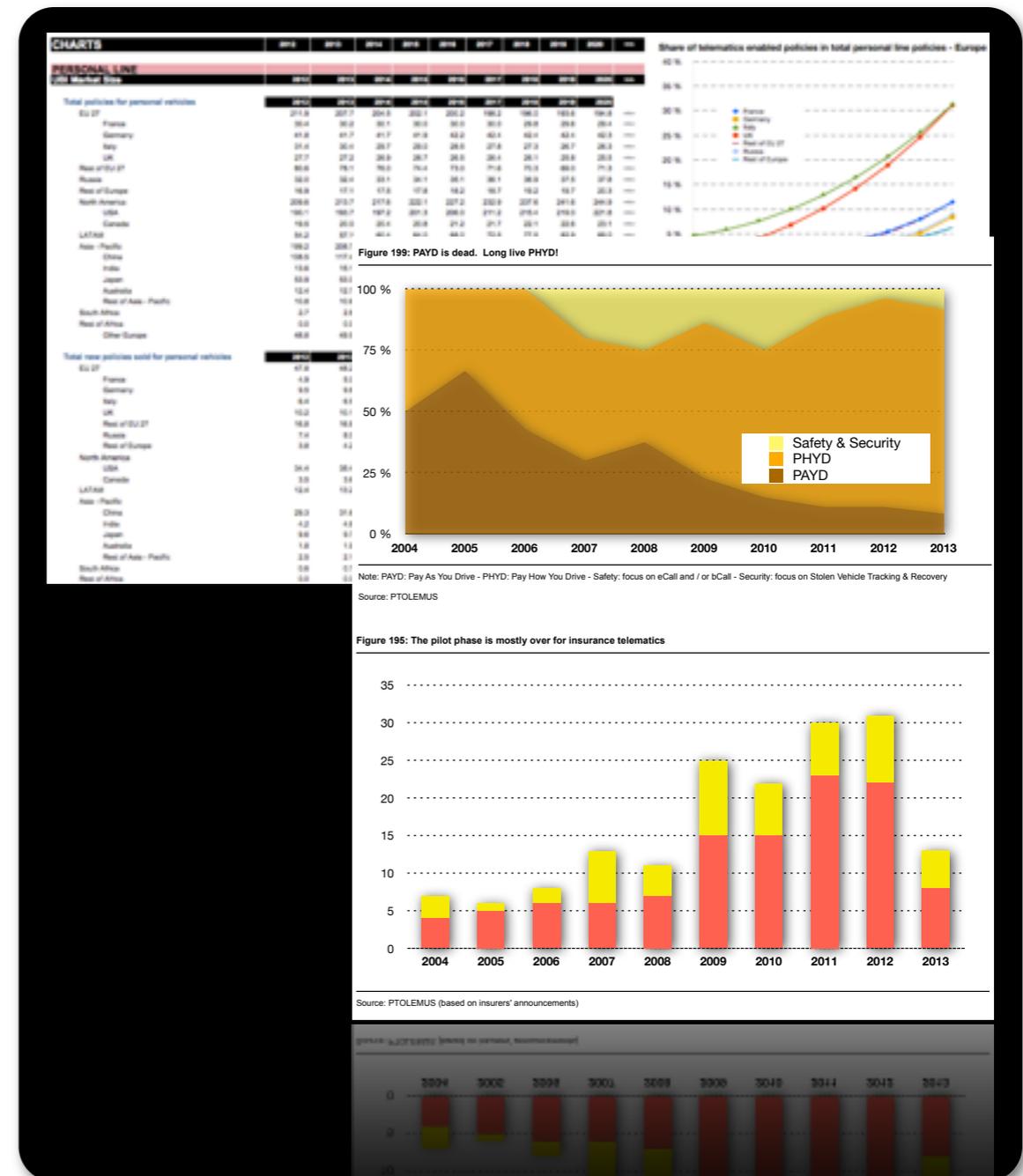
Identify the regulatory drivers that will influence your UBI strategy, including:

- The **eCall, ERA Glonass, CONTRAN 245** and **EOBR** mandates
- The **Viberto** Judgement
- The **Test-Achats gender ruling**
- The **Mario Monti** legislation
- The **1995 European Data Protection Directive** regulation
- The **privacy regulations** and industry best practices
- The **patents** in place and current **Intellectual property** litigation proceedings
- The **US filing rule** discrepancies

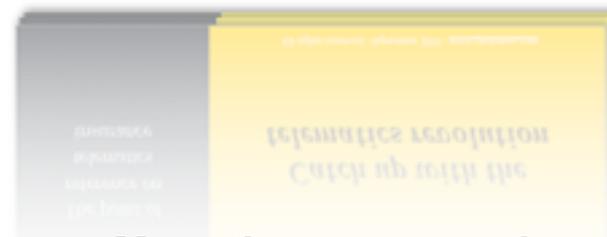
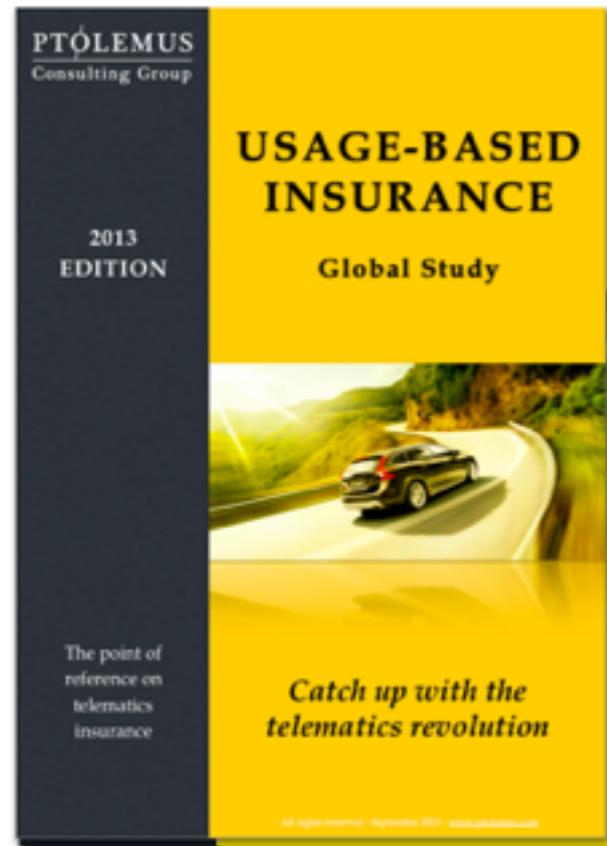


An in-depth market forecasts of UBI that you can rely on

- 10 year (2010-2020) market forecasts
 - Over 6000-line model, built bottom up (based on 2500 lines of input)
 - Using latest available market figures
- A comprehensive analysis & decision-making tool
 - 4 technologies (embedded OBUs, black boxes, OBD, smartphones)
 - 16 areas including USA, France, Germany, Italy, UK, Japan, China, India, Brazil, South Africa, Russia, Japan, LATAM, etc.
 - Differentiated by channels and segments: aftermarket / OEM, personal / commercial
- Market size (volumes & revenues) for insurers, TSPs, TTPs, OEMs and MNOs



The study is provided as a searchable PDF document that can be used by the whole company, worldwide

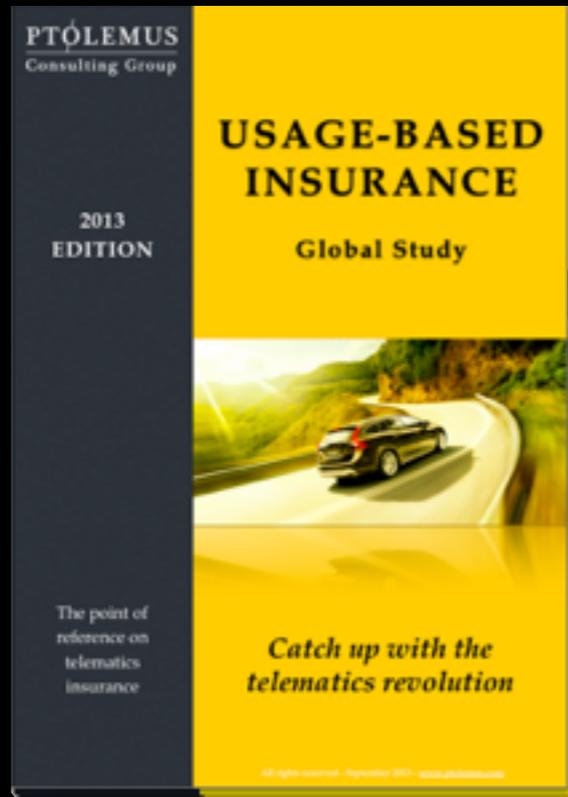


More than a research study, a real strategic market analysis

Reports	Full Study	Full Study with 10-year market forecasts
Contents	<ul style="list-style-type: none"> • 770 pages • Electronic version (pdf format, password-protected) 	<ul style="list-style-type: none"> • 770 pages • Electronic version (pdf format, password-protected) • Excel market forecasts outputs with graphs (password-protected)
Company-wide licence	<p>€ 4 995 Approx. \$6 754</p>	<p>€ 5 995 Approx. \$8 106</p>

For more information, contact Thomas on thallauer@ptolemus.com
Alternatively call direct on +44 7973 889 392

The UBI global study is your strategic swiss knife



More than a research study, a real strategic market analysis

- **Strategic tool for decision making**
 - Identify your competitor's strategy
 - Learn from the mistakes made in the past
 - Find out successful model and create your own
 - Visualise the key information to memorize them faster
- **External and internal sales tool**
 - Unparalleled source to create your own presentations
 - 300+ original graphs and visuals
 - Unique list of actors, vendors and customers
- **Years of market research done for you**
 - Uncover the new market opportunities
 - Quantify your and other regional markets
 - Predict new technology developments

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