

Strategic Analysis of Integration of ADAS with Telematics

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We also certify that no part of our analyst compensation was, is or will be, directly or indirectly, related to the specific recommendations or view expressed in this research service.



Objective and Methodology

Objective:

To study the potential for Integration of ADAS with Telematics

The key focus of this research is to analyse:

- Market overview and trends
- Market drivers, restraints and industry challenges
- Product analysis
- Scenario Analysis
- Market size and forecast assessment
- Analysis of the competitive environment
- Strategic Recommendations

Research Methodology

Frost & Sullivan's research study is based on secondary and primary research data.

Secondary Research: Extraction of information from existing reports and project material within the F&S database. The research also includes data and information gathered from technical papers, specialized magazines, seminars and Internet research

Primary Research: Over 15 interviews have been conducted over the phone by senior consultants/industry analysts with Original Equipment Suppliers, regulation authorities and Distributors. Primary research has accounted for 80 per cent of the total research.

Research Methodology (Contd...)

⇒ Frost & Sullivan Market Forecasting Methodology

- Forecasting is the result of information pertaining to growth rates and penetration rates gathered from industry participants through primary research. A comprehensive bottom-up approach is adopted with breakdown by VM and vehicle segment allowing for a detailed market analysis and forecast.
- The forecasts are based on sales figures for the European market obtained from JD Power. The vehicle segmentation is also according to that provided by JD Power.

⇒ Contribution from Primary Research:

- The penetration rates and forecast figures are a combination of those obtained during discussion with market participants and those deduced during the analysis of the gathered information.
- All figures are rounded and the base year considered is 2007. The Source for all Charts and Figures in the research service is Frost & Sullivan unless mentioned otherwise.

Vehicle Segment	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Basic	1,100,696	1,245,074	1,331,437	1,507,764	1,609,648	1,614,831	1,828,876	1,983,862	2,044,570	2,160,039	2,272,444
High Luxury	48,654	63,945	62,679	62,625	64,143	69,443	67,634	63,815	70,162	69,426	65,874
High Medium	2,261,733	2,226,060	2,137,617	2,270,308	2,379,074	2,414,946	2,454,020	2,369,647	2,344,929	2,381,297	2,575,369
Large	44,612	59,791	43,205	33,799	42,599	37,529	34,077	55,510	52,367	43,311	39,013
Low Luxury	531,023	531,710	504,243	454,057	507,369	593,170	577,946	543,374	511,945	489,303	469,359
Low Medium	4,646,396	4,559,706	4,756,921	4,921,206	4,880,956	4,853,010	5,131,631	5,251,879	5,190,494	5,241,138	5,466,571
MAV	2,977,228	2,970,385	3,019,804	2,720,982	2,841,574	3,255,429	3,478,372	3,690,964	3,681,685	3,555,808	3,569,657
Pickup	167,973	219,162	231,749	230,276	241,133	267,799	302,820	296,097	292,983	309,758	304,704
Small	4,204,529	4,521,067	4,604,225	4,228,126	4,127,521	4,197,634	4,018,047	4,351,965	5,022,887	5,467,631	5,335,776
Sports	437,426	457,640	502,024	607,048	789,224	875,551	844,638	789,332	760,809	739,881	629,337
Super Luxury	2,642	2,728	3,653	2,642	2,552	3,959	4,974	4,504	3,999	3,494	3,480
SUV	1,271,541	1,405,958	1,748,185	2,123,046	2,314,305	2,499,541	2,791,257	2,886,492	2,991,312	3,005,201	2,831,041
Unclassified	495,020	652,651	806,909	791,936	808,081	827,985	843,269	880,208	899,915	910,598	956,262
Grand Total	18189473	18915877	19752651	19953815	20608179	21510827	22377561	23167649	23868057	24376885	24518887

Research Methodology (Contd...)

Strategic Analysis of Integration of ADAS with Telematics Segmentation (Europe), 2008-2015

Segment	Examples
Basic	Ford Ka, Fiat Panda, Opel Agila, Citroen C2, Peugeot 1007, Toyota Aygo
Small	BMW Mini, Mercedes-Benz A-Class, Mazda2, Fiat Punto, Opel Corsa, Citroen C3, VW Polo
Low Medium	BMW 1-series, Ford Focus, Alfa Romeo 148, Citroen C4, Toyota Corolla, VW Golf, Opel Astra
High Medium	BMW 3-series, Mercedes-Benz C-Class, Ford Mondeo, Volvo S40, VW Passat
Large	Chrysler 300, Kia Opirus, Citroen C6, Peugeot 607, Toyota Camry
Low Luxury	Mercedes-Benz E-Class, Volvo S80, Saab 9-5, BMW 5 Series, Jaguar S type
High Luxury	BMW 7-series, Mercedes-Benz S-Class, Audi A8, VW Phaeton
Super Luxury	Rolls Royce Phantom, Bentley Arnage, Mercedes Maybach
MPV	Ford C-Max, Mazda Premacy, Fiat Ulysse, Opel Meriva
SUV	BMW X3, Mercedes-Benz M-Class, Honda CRV, Land Rover Freelander
Unclassified	Others

Source: JD Power

Table of Contents

Research Methodology

1.Executive Summary

2. Total Market for Strategic Analysis of Integration of ADAS with Telematics

1. Overview

1. Introduction

2. Total Roadmap

2. Key Technology, Market and Legislation Trends

1.Market Trends

2. Technology Trends

1. Role of Car-to-Car / Car-to- Infrastructure Communication

3. Legislative Trends

3. Total Market Drivers and Restraints

1. Market Drivers

2. Market Restraints

3. Market Challenges

4. Market Measurements

1. Total Market –Revenues

2. Total Market –Unit shipments

Table of Contents (Contd...)

3. Strategic Analysis

1. Value Chain Analysis

4. Key EU Forum Initiatives

1. Maps & ADAS

1. Objective & Member

2. Status

1. Technology

2. Application Development & Commercialization

5. Analysis of ADAS Systems with Telematics Integration

1. Navigation based Predictive Information and Assistance systems (PIA)

1. Speed Alert

1. System Description and Analysis

2. Market Measurements

2. Curve Warning

1. System Description and Analysis

2. Market Measurements

3. Fuel economy systems

1. System Description and Analysis

2. Market Measurements

3. Detailed Pricing Analysis

Table of Contents (Contd...)

2. Navigation supported Advanced Driver Assistance systems

1. Map Supported ACC

1. System Description and Analysis

2. Market Measurements

1. Detailed Unit Shipments Forecasts

2. Detailed Revenue Forecasts

3. Detailed Pricing Analysis

2. Map Supported Adaptive Front Lighting

1. System Description and Analysis

2. Market Measurements

1. Detailed Unit Shipments Forecasts

2. Detailed Revenue Forecasts

3. Detailed Pricing Analysis

3. Map Supported Lane Departure Warning

1. System Description and Analysis

2. Market Measurements

1. Detailed Unit Shipments Forecasts

2. Detailed Revenue Forecasts

3. Detailed Pricing Analysis

Table of Contents (Contd...)

6. Key Supplier Initiatives

1. Bosch
2. Continental
3. Denso
4. Valeo
5. Hella

7. Key Vehicle Manufacturer Initiatives

1. BMW
2. Daimler
3. Volkswagen
4. Ford
5. Nissan
6. General Motors
7. Toyota
8. Honda

CHAPTER - 1

Executive Summary



Table of Contents

1. Executive Summary

1.1 Introduction

1.1.1 Top Level Strategic Fact Sheet

1.1.2 Market Drivers and Restraints

1.1.3 Major Industry Challenges

1.1.4 Legislative Trends

1.1.5 Road Map

1.2 Key Research Findings

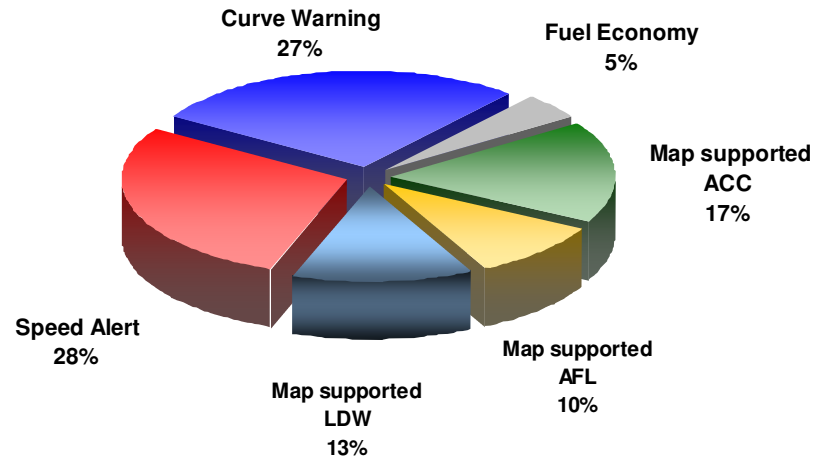
1.2.1 Total Market

1.2.2 Compleitive Analysis

1.2.3 Strategic Recommendations and Conclusions

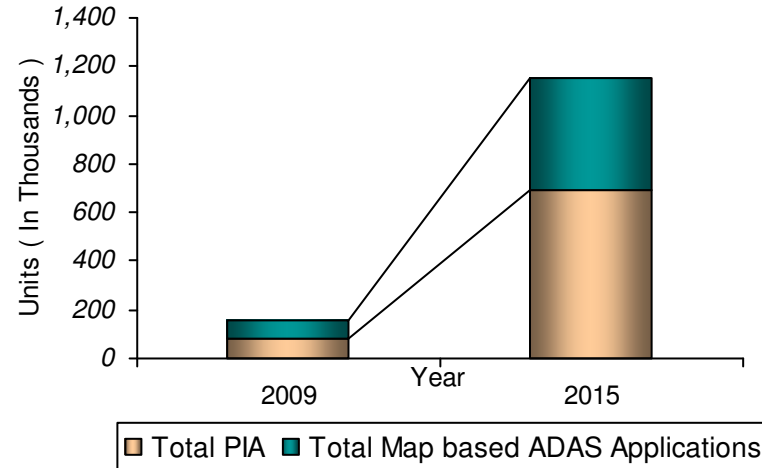
Top Level Strategic Fact Sheet

ADAS with Telematics Market: Product Breakdown Analysis (Europe), 2008-2015



- ❖ Curve warning systems to contribute 27 per cent of total unit shipment in this market
- ❖ Map-supported ACC to play a very important role by contributing toward 17 per cent of total unit shipment in 2015
- ❖ Fuel economy systems are expected to contribute about 5 per cent of total unit shipment because of its introduction in 2013

ADAS with Telematics Market: Unit Shipment Map based/Supported Systems (Europe), 2009-2015

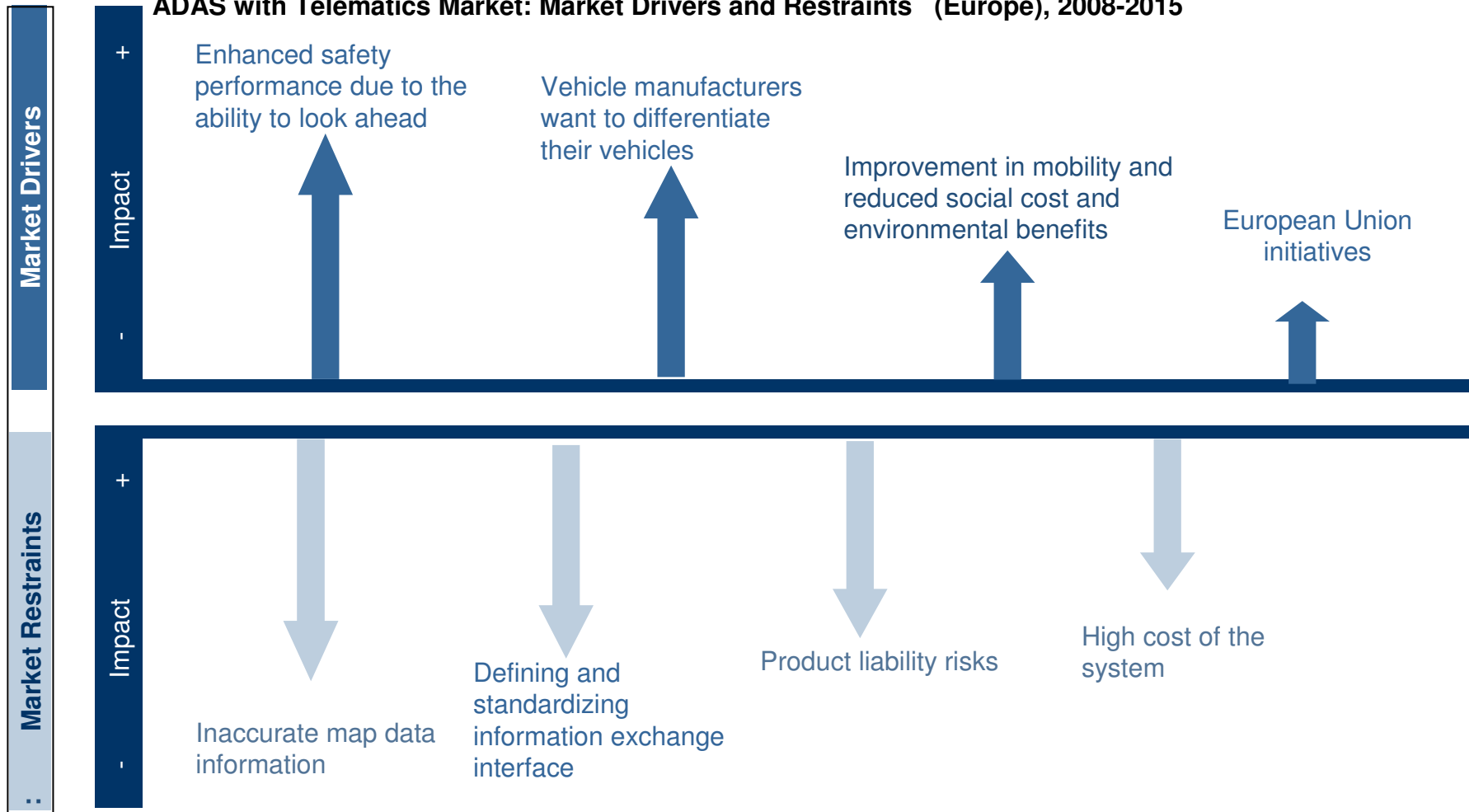


System	PIA Applications	Map supported ADAS
Key VMs	Daimler , BMW	BMW
Key Suppliers	Navteq ,Teleatlas	Bosch
Technology	Navigation system	ADAS Interface

Note: All figures are rounded; the base year is 2008. Source: Frost & Sullivan

Total Market Drivers and Restraints

ADAS with Telematics Market: Market Drivers and Restraints (Europe), 2008-2015

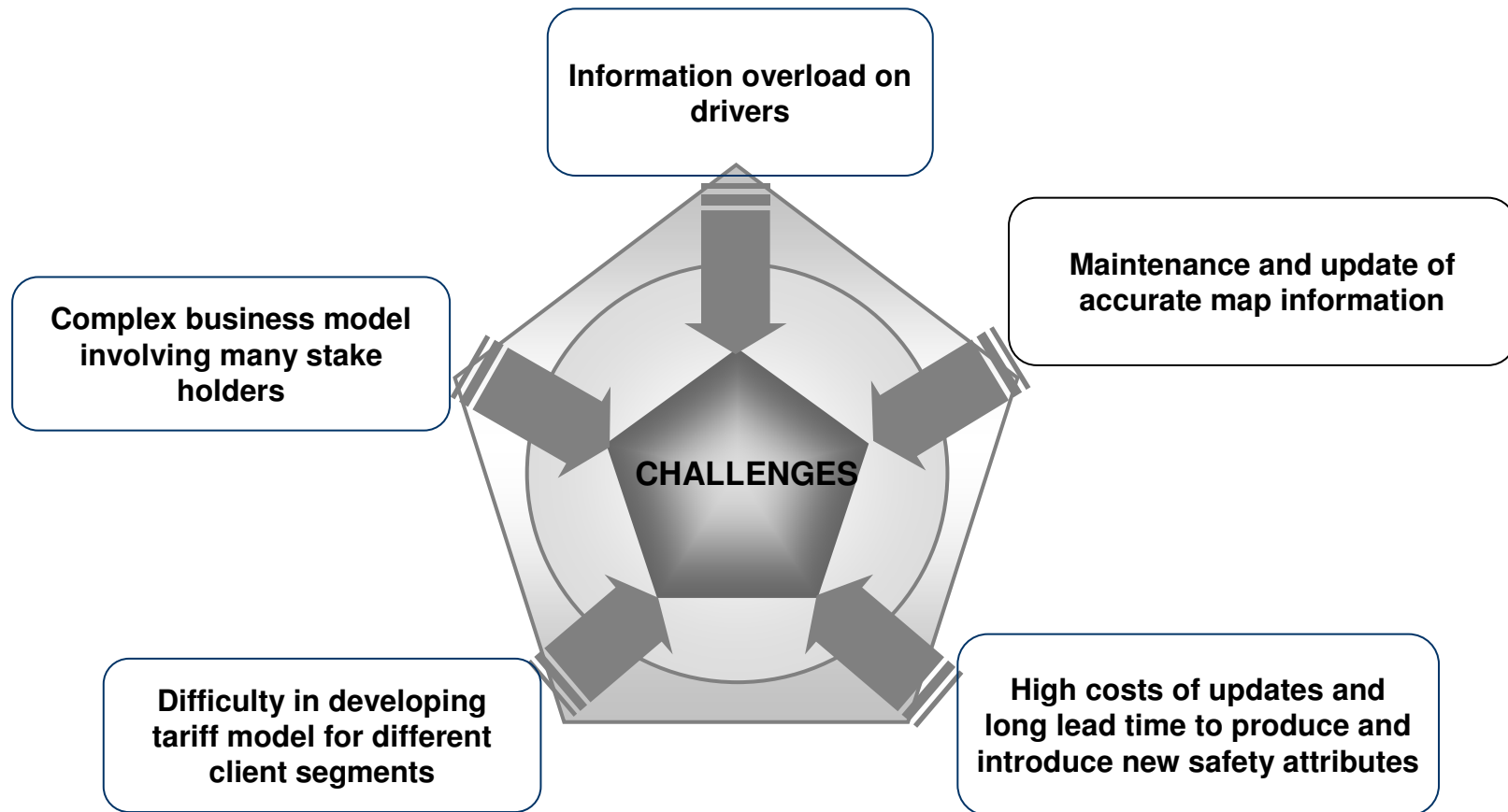


Key: As Rated by Industry Participants

Source: Frost & Sullivan

Market Challenges

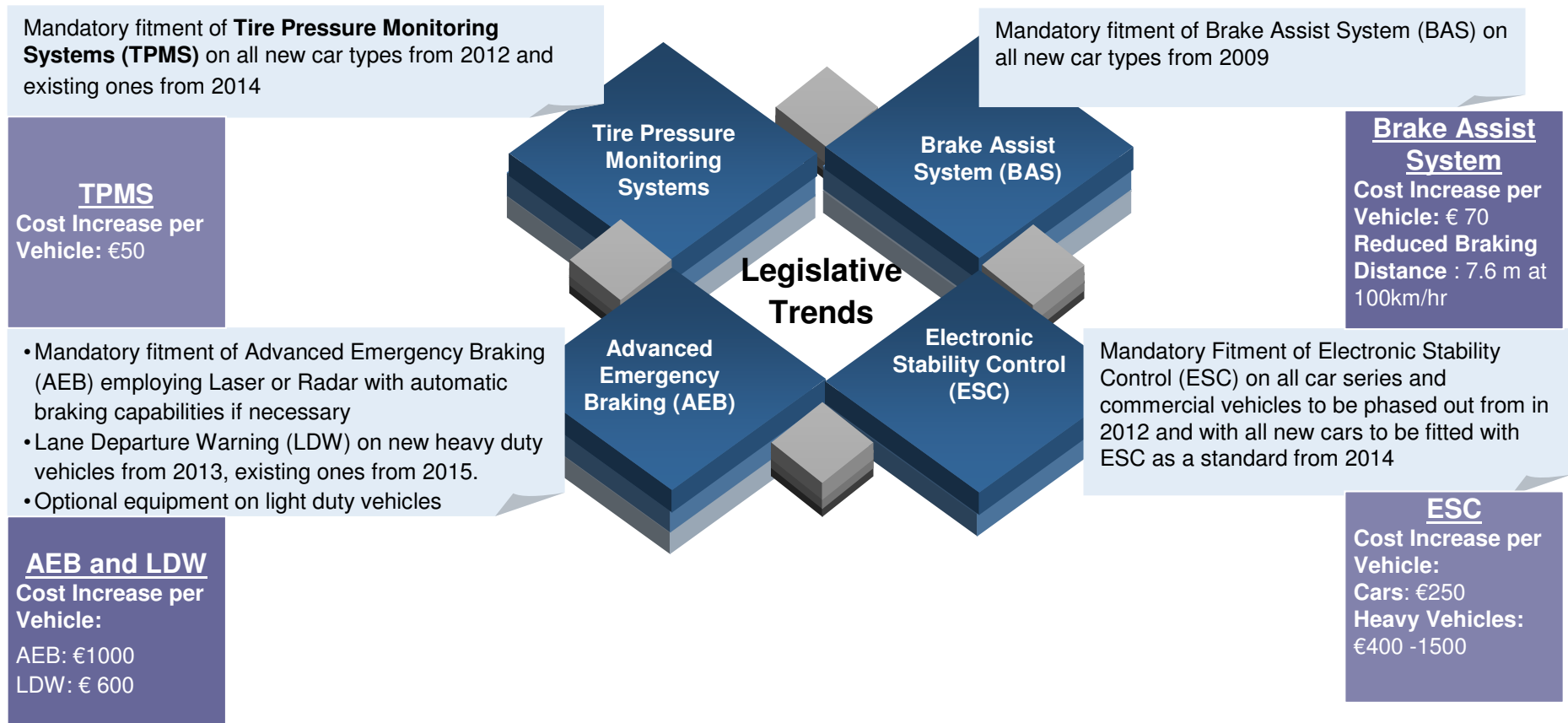
ADAS with Telematics Market: Market Challenges (Europe), 2008-2015



Source: Frost & Sullivan

Legislative Trends

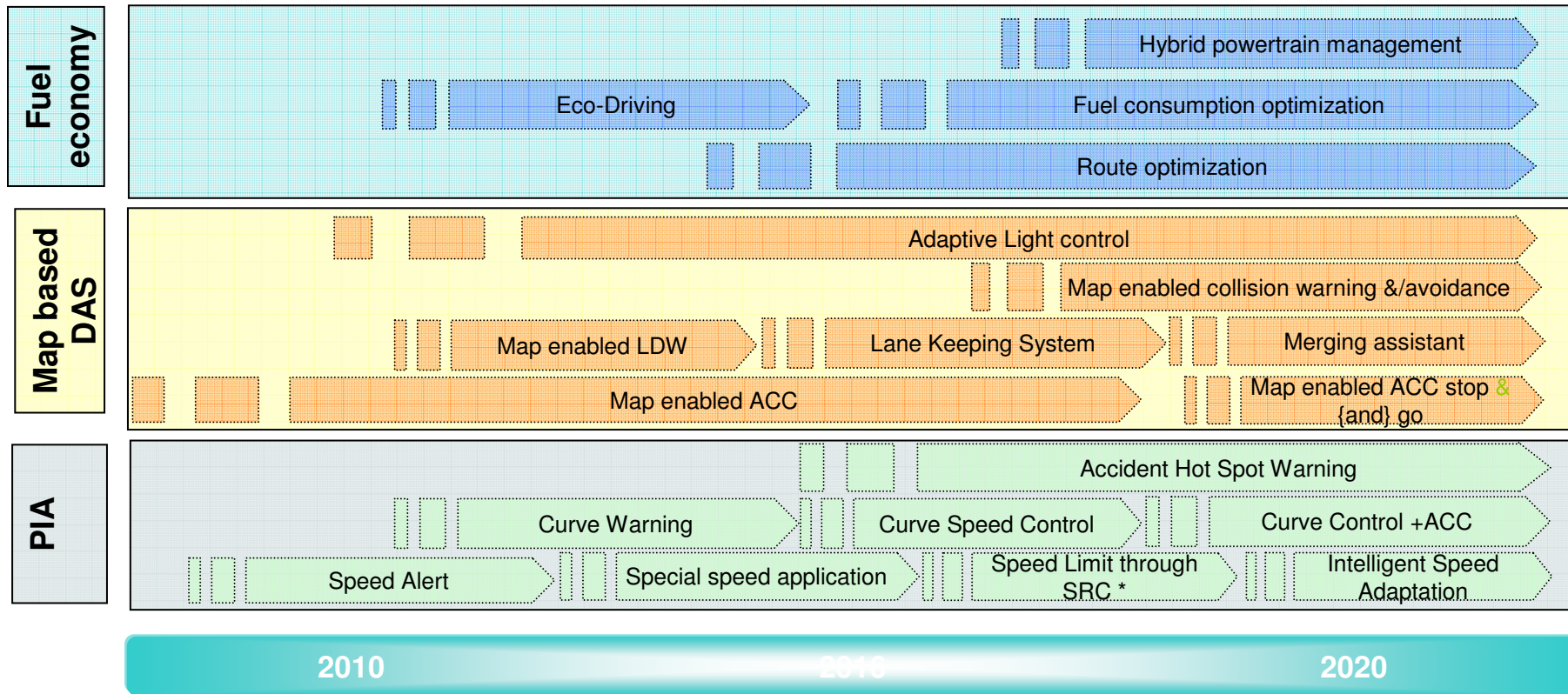
ADAS with Telematics Market: Legislative Trends (Europe), 2010-2020



Source: Frost & Sullivan

Application Evolution Roadmap-2010-2020

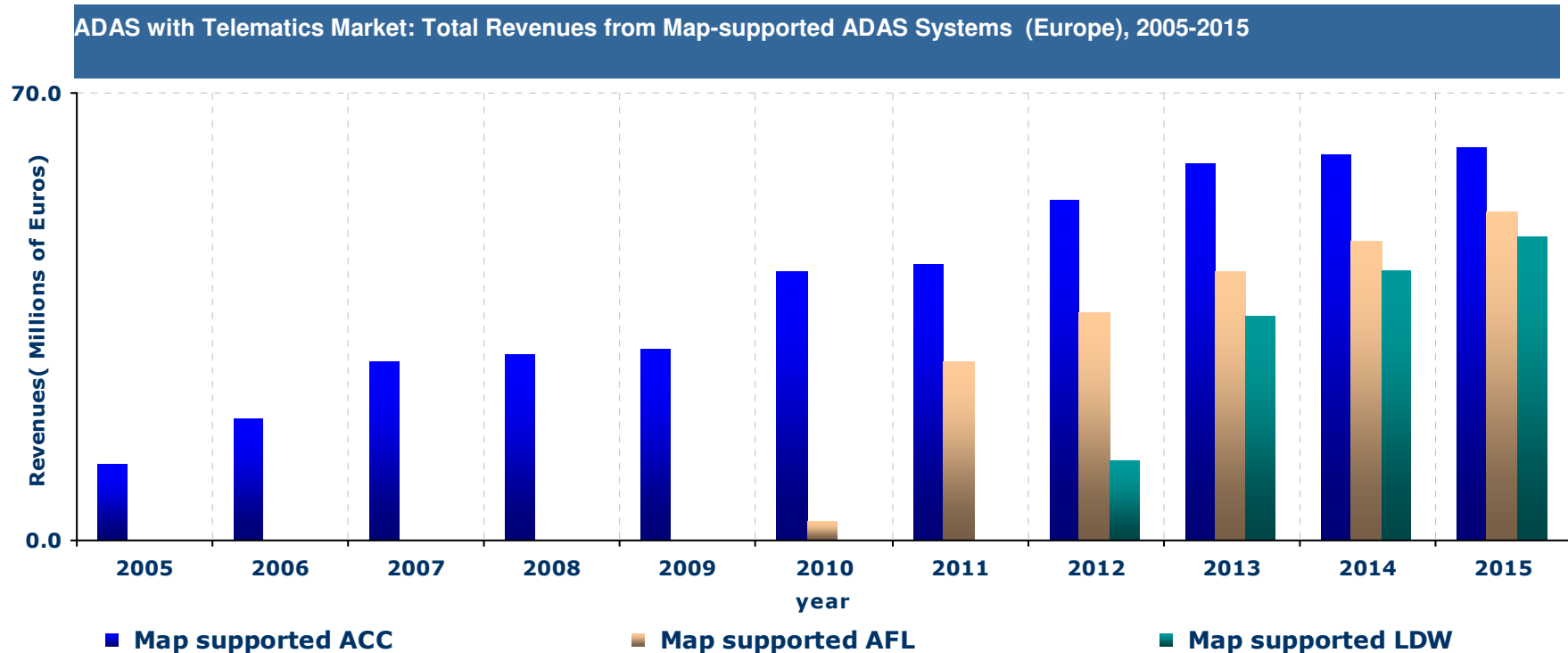
ADAS with Telematics Market: Roadmap (Europe), 2010-2020



SRC *-Dedicated Short Range Communication

Source: Frost & Sullivan

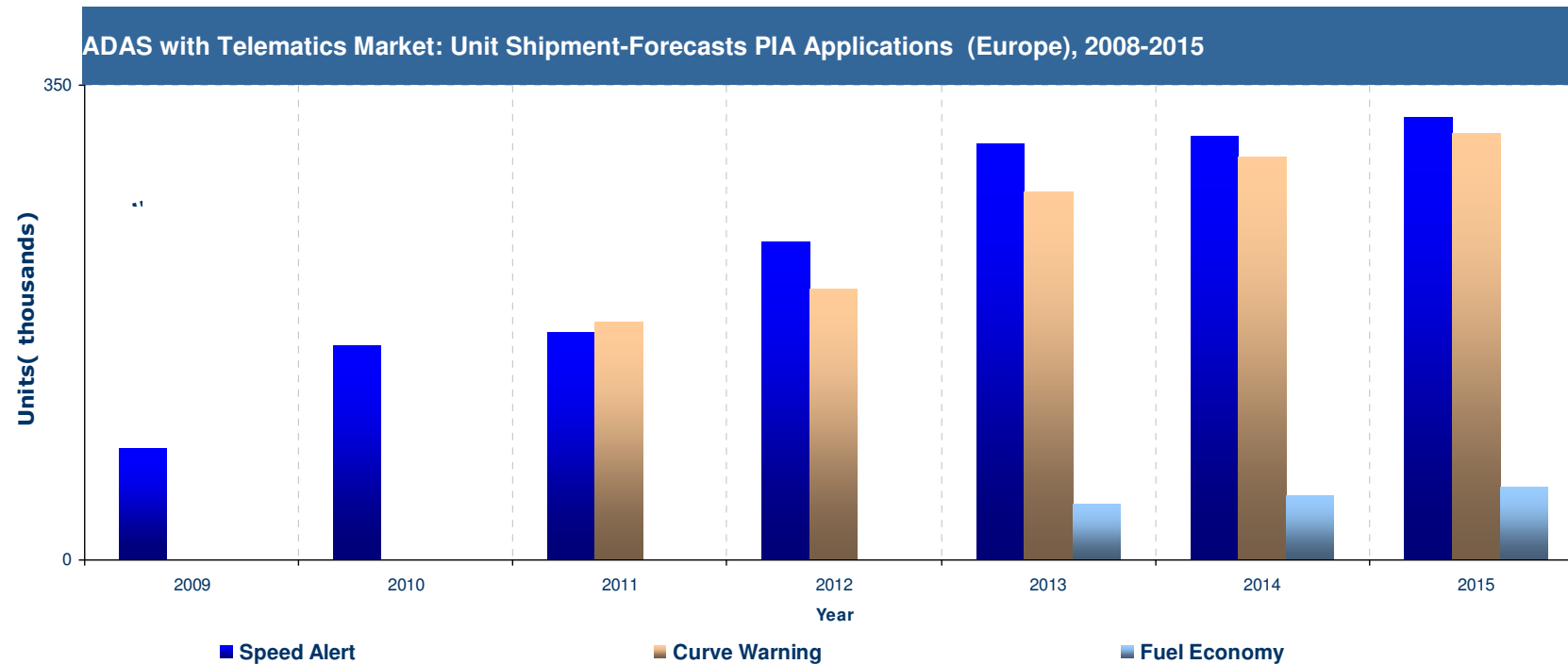
Total Market Revenues



Note: All figures are rounded; the base year is 2008 Source: Frost & Sullivan

- Revenues for map-supported ACC is expected to grow at a CAGR of 128 per cent to 61 million Euros in 2015
- The total market revenues for map-supported ADAS systems are expected to reach 143 million Euros by 2015
- Revenues for map-based AFL is expected to grow at a CAGR of 65.2 per cent to 34 million Euros in 2015
- Revenues for map-based LDW is expected to grow at a CAGR of 56.5 per cent

Total Market Unit Shipment for PIA Applications



Note: All figures are rounded; the base year is 2009 Source: Frost & Sullivan

- Total unit shipment of PIA applications is expected to be about 700,000 units in 2015
- Speed alert system is expected to have a market volume of 325,000 units in 2015, followed by curve warning systems at 310,000 units by 2015
- The fuel economy systems based on on-board navigation systems are expected to be in the market in 2013 in select models

Vehicle Manufacturers- Competitive Analysis

ADAS with Telematics Market: Comparative Analysis of VMs (Europe), 2010-2020

Scenario in 2009

VM	PIA	Map-supported ACC	Map - supported AFL	Map - supported LDW
BMW				
Daimler				
Volkswagen				
GM				
Honda				
Ford				
Toyota				

Scenario in 2015

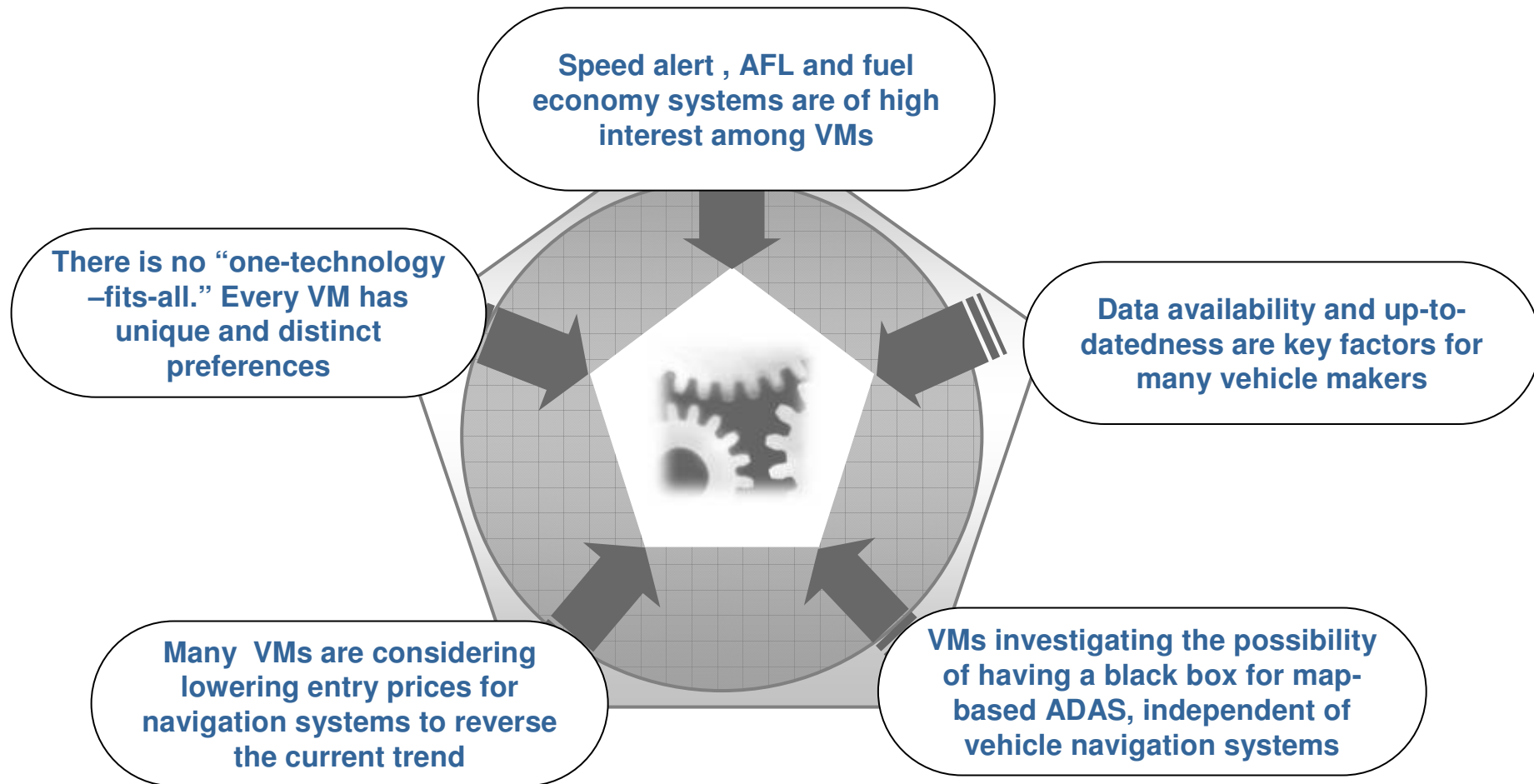
VM	PIA	Map - supported ACC	Map - supported AFL	Map - supported LDW
BMW				
Daimler				
Volkswagen				
GM				
Honda				
Ford				
Toyota				



Source: Frost & Sullivan

Key Conclusions

ADAS with Telematics Market : Key Conclusions (Europe), 2010-2016



Source: Frost & Sullivan

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