

OEM eCall Strategies

31st January, 2017

Our Expertise



Connected



infotainment apps | remote services
car IoT | contextualization | telematics

Autonomous



sensors | advanced driver assistance
driver monitoring | V2X

Secure



cyber security | anti-theft | risk
assessments | countermeasures

The state of the connected car today



OEM Trends

Today in **Europe** dedicated, embedded cellular modems are primarily fitted to premium brands

Services		Audi	BMW	FCA	Ford	GM	Honda	Hyundai	Infiniti	JLR	KIA	Lexus	Mazda	Mercedes-Benz	Mini	Mitsubishi	Nissan	Porsche	PSA	Renault	Skoda/Skoda	Smart	Subaru	Suzuki	Tesla	Toyota	Volvo	VW
Safety	eCall	✓	✓		✓	✓				✓				✓	✓			✓	✓		P						✓	✓
	bCall	✓	✓			✓				✓				✓	✓			✓	✓		P						✓	✓
	Crisis/panic assist													✓	✓													

Source: SBD, OE Services Tracker (EU) 2016 Q4

■ Embedded
 ■ Tethered

The **US** is seen as three years ahead, and these OEMs are anticipate to increasingly deploy their technologies to other markets, such as Europe, sooner than later because of customer demand and internal business reasons.

Services		Acura	Audi	BMW	Chrysler	Fiat	Ford	GM	Honda	Hyundai	Infiniti	JLR	Kia	Lexus	Mazda	MB	MINI	Mitsubishi	Nissan	Porsche	Smart	Subaru	Tesla	Toyota	VW	Volvo	
Safety	eCall	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	P		✓	✓		✓		✓	✓	✓	✓
	bCall	✓	✓	✓	✓			✓		✓	✓	✓	✓	✓		✓	P		✓	✓		✓		✓	✓	✓	✓
	Crisis/panic assist	✓		✓				✓		✓						✓										✓	

Source: SBD, OE Services Tracker (NA) 2016 Q4

■ Embedded
 ■ Tethered

Embedded connectivity forecast



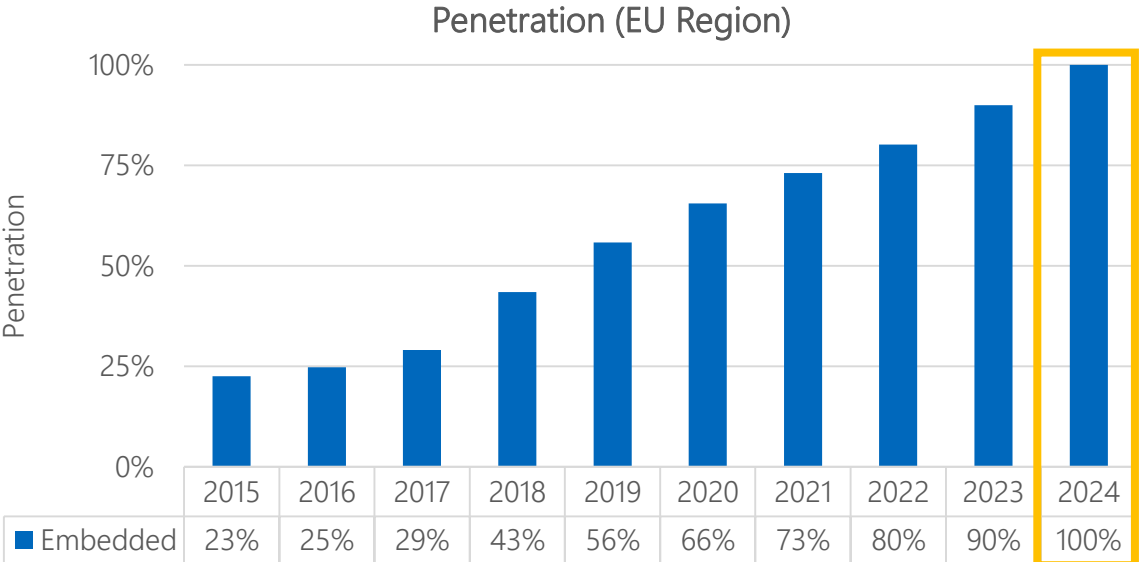
Connecting the car is becoming a matter of course

Though OEMs are preparing to implement an eCall module to all EU-region passenger vehicles, it is important to recall that:

- This applies to new type approvals
- Automobile model cycles are usually four to six years

As a result, SBD anticipates that for the EU full penetration of embedded connectivity will occur in 2024 for new passenger vehicles.

This includes embedded connectivity limited solely to public eCall.



Source: SBD, OE Services Forecast 2016/2017

Influencing factors for OEMs



What drives OEMs?

Factor	Public eCall	Public eCall Factors	Private eCall	Private eCall Factors
Is there a regulation?	Yes	Only required on type approval	No	N/A
Will it sell more cars?	Unlikely	If customers demand/expect it	Unlikely	Only if customers demand/expect it due to public eCall "shortcomings"
Will it reduce cost?	No	N/A	No	N/A

Factors of influence:

- Public awareness
 - Create customer demand through awareness campaigns
- Competitive pressure
 - There is strong customer demand and key competitors apply it faster
- Risk
 - Will there be any scrutiny or brand image risk (e.g. "naming and shaming") for OEMs that delay?

Private eCall



The current OEM positions

Today

Five brands have been offering private eCall from before the public eCall decision:



Early Adopters

Since, seven additional brands have started offering private eCall:



Recent Converts

The rest are waiting.



Observers

▶ If success of a technology or service is defined by others copying or following your lead, private eCall has had limited success

Post-2018 Decision



Public eCall

- Lower cost
- "Tick the box"



Private eCall

- Improved coverage (unprepared countries)
- Language (customer expectations)

OEM priorities

Example



Aiming for zero

Vision 2020 is about reducing the number of people that die or are seriously injured in road traffic accidents to zero. Protecting and caring for people is at the heart of Volvo Cars' philosophy and this is our commitment to saving lives.

Some OEMs are seeking to make cars as safe as possible, one example is Volvo aiming for “zero deaths” in traffic accidents by 2020. That said, the price of such vehicles will remain out of reach for many consumers.

Connectivity behaviour





The three main options open to carmakers

1. How will OEMs delineate their core connected car services vs. public eCall?

Type of connectivity	Paid SIM	Public SIM
Private eCall + Public eCall + Value Added Services	Green	Green
Public eCall + Value Added Services	Green	Green
Public eCall	Grey	Green

Value added services include features such as information call, remote door lock/unlock, car finder, etc.

2. Complimentary service periods are increasing, how will OEMs offering private eCall switch from their suite of services to public eCall when the term expires?

Complimentary Connected Services Periods (Sample)		
 Mercedes-Benz	Was	(Nothing)
	Now	3 years
	Was	4 years
	Now	10 years