SBD is expecting almost 25 million cameras to be fitted to cars in Western Europe each year by 2020.

A significant part of this growth is being driven by the new EuroNCAP Safety Assist protocol coming into force from 2014.
This radical growth is not just limited to supporting active safety applications. Equally important will be the growth in rear-view and surround-view cameras, which provide drivers with enhanced parking support. Camera technology will also be introduced for monitoring drivers’ attentiveness and may even act as an enabler for automated driving.

So how should OEMs and tier-one suppliers choose camera technologies?

There are a significant number of camera technologies available, so it can become difficult to navigate through this maze of options. Each technologies offer strengths and weaknesses, and to complicate matters further they also need to be tailored to the features being supported. Although cameras are clearly moving from niche to mass market in the coming years there are still a number of features that cannot be fully supported. Cameras are particularly vulnerable to contamination and are not yet an all-weather sensor.

The business case for introducing cameras into the car also needs to be considered. Cameras have so far been introduced by OEMs in a piecemeal manner. However, as the number of cameras grows it is becoming increasingly important to optimise the vehicle sensor architecture so that an affordable business case can be achieved.

Overall, the future need for cameras in the car is clear. However, as ADAS shifts from niche to mass market over the coming years, vehicle manufacturers will begin to face new commercial and technical challenges associated with a multi-camera car.

SBD’s latest report on Technical & Market trends for camera-based ADAS in EU explains the different camera technologies, analyses how vehicle manufacturers and tier-one suppliers can overcome these challenges, and forecasts how cameras will evolve to become a critical component in all cars over the coming decade.
This report analyses the technical and market trends for camera-based ADAS systems in Europe, outlining the impact of EuroNCAP's inclusion of AEB and LDW into their star rating, and the subsequent changes in strategies likely to be adopted by vehicle manufacturers.
Deepa Rangarajan, Analyst, Safe Car

Deepa graduated from the University of Leeds with a Master’s degree in Embedded Systems Engineering. As an Analyst within Safe Car team, Deepa specialises in ADAS technologies and associated market trends, in addition to supporting telematics research and consultancy projects for the Connected Car team. Some of her recent works include ADAS technology guide, automotive app guide and analysing trends within the electric vehicles market.

Alain Dunoyer, Head of Safe Car Division

Alain completed an MSc and a PhD in Control Systems Engineering at Coventry University before joining Jaguar Land Rover as a control system engineer, working on adaptive cruise control and forward collision warning systems. He later became a research technical specialist in sensor systems where he was responsible for the early development of a number of driving assistance systems. At SBD he is responsible for the Safe Car division where he guides and manages the research and consulting. Alain is an ADAS technology expert who provides recommendation to SBD’s clients on defining and implementing their ADAS strategies.

Related Reports

EU ADAS Guide
Ref: SAF/534

SBD’s 2012 Safe car guide comprises of a database listing the ADAS availability at a model level for more than 30 OEMs in Europe. Also included is an analytical layer that helps users to compare different OEM and supplier offerings as well as analyse the fitment trends for various ADAS applications.

Safe Car Guide - Government & Market Watch
Ref: SAF/535

With quarterly updates, SBD’s Safe Car Guide (Government and Market Watch) is a crucial tool for finding out more about the latest initiatives that could play a major role in promoting ADAS uptake in different regions. The Guide includes analysis on the impact of each initiative on vehicle manufacturers and tier-one suppliers, as well as recommendations on how best to adapt to any upcoming changes.