# Press Release



# **Autoliv Research to Launch Learning Intelligent Vehicle**

(Stockholm, Sweden, December 20, 2016) — — Autoliv, Inc. (NYSE: ALV and SSE: ALIVsdb), the worldwide leader in automotive safety systems, is to launch a learning, intelligent vehicle system. The system is developed by Autoliv Research to facilitate collaboration and shared control between driver and vehicle. This in order to attain trust and facilitate required safety in autonomous driving. The LIV-system is to be demonstrated at CES in Las Vegas on January 4.

The first version of LIV, the Learning Intelligent Vehicle, utilizes Artificial Intelligence (AI) technology, and coming versions will incorporate on-line and off-line machine learning, utilizing a wide array of data sources and developing an individual relationship to the driver. LIV, pronounced {'li:v} or "leave", literally means "life" in Swedish and is a common Swedish first name as well as part of Autoliv's own life-assuring brand name.

"With this research platform, Autoliv Research aims to solve what truly proactive safety is all about. With LIV, we have found a way to combine our history of saving lives and our leading technology within active safety to accelerate the safe development of automated vehicles," says Ola Boström, Vice President Research at Autoliv.

### LIV 1.0

The first version of LIV is equipped with Autoliv technology readily available today, connecting all the different technologies via an Al-based ECU, which communicates and acts on all available data. Data sources include what is derived from the driver, the car, its surroundings, as well as from other vehicles and external data sources.

In both autonomous driving situations as well as with the driver in control, LIV complements the driver, monitoring and analyzing all aspects surrounding the vehicle and safeguarding the situations in close cooperation with the driver.

LIV also provides assistance based on the traffic around the car as well as the preferences of the driver, keeping the driver in the loop by allowing for two-way communication as well as interpreting the driver's behavior. In forthcoming versions, LIV will also incorporate machine learning technology, providing the necessities to learn the unique characteristics in the relation between the individual driver and vehicle.

The main reason for promoting the LIV research platform, incorporating and testing new and existing technologies on a continuous basis, is to develop the necessary conditions to be able to unleash autonomous driving and AI technology on a broad scale – while maintaining safety and providing a better driving experience. The accelerated innovation and technology development within autonomous driving and automated transport solutions in turn requires for more of a so called human centric approach – where shared control and two-way trust between human and smart vehicle is crucial for a safe autonomous development.

Ola Boström, Vice President Research at Autoliv and in charge of the LIV project, explains further: "The more advanced machine learning and AI technology becomes, the more important it is to have a human centric approach – understanding how we humans and smart machines collaborate as a joint cognitive system. As vehicles become safer, in a sense we become worse drivers. We no longer need to control the vehicle unless it needs or wants us to. With LIV, we have turned this table around, with a system that trusts you to drive and works together with you, and not the other way around."

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### About Autoliv

Autoliv, Inc., the worldwide leader in automotive safety systems, develops and manufactures automotive safety systems for all major automotive manufacturers in the world. Together with its joint ventures, Autoliv has more than 80 facilities and 68,000 employees in 27 countries. In addition, the Company has 20 technical centers in nine countries around the world, with 20 test tracks, more than any other automotive safety supplier. Sales in 2015 amounted to about US \$9.2 billion. The Company's shares are listed on the New York Stock Exchange (NYSE: ALV) and its Swedish Depository Receipts on the OMX Nordic Exchange in Stockholm (ALIV sdb). For more information about Autoliv, please visit our company website at www.autoliv.com.

#### Safe Harbor Statement

This report contains statements that are not historical facts but rather forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements include those that address activities, events or developments that Autoliv, Inc. or its management believes or anticipates may occur in the future. All forward-looking statements are based upon our current expectations, various assumptions and data available from third parties. Our expectations and assumptions are expressed in good faith and we believe there is a reasonable basis for them. However, there can be no assurance that such forward-looking statements will materialize or prove to be correct as forward-looking statements are inherently subject to known and unknown risks, uncertainties and other factors which may cause actual future results, performance or achievements to differ materially from the future results, performance or achievements expressed in or implied by such forward-looking statements. Numerous risks, uncertainties and other factors may cause actual results to differ materially from those set out in the forward-looking statements. The Company undertakes no obligation to update publicly or revise any forward-looking statements in light of new information or future events. For any forward-looking statements contained in this or any other document, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995, and we assume no obligation to update any such statement.