

Media information

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Volkswagen Group invests in leading technology company in the field of 3D holography

- Through minority stake in start-up SeeReal Technologies, Volkswagen secures futureoriented technology for automotive applications
- Highly promising research concerning head-up and interior displays with three-dimensional holographic display elements

Wolfsburg, August 30, 2019 – Volkswagen has acquired a minority stake in the leading technology company SeeReal Technologies. This participation will secure access for the Group to future-oriented augmented reality in the field of display technologies for the automobile. The research project will provide the Group with key know-how to make driving even safer and more convenient in the future.

Potentially hazardous situations on the road will be projected into the driver's environment in three dimensions, "touchable" displays will be suspended instead of controls, partners and telephone conversations will appear as holograms, passengers will be able to play hovering three-dimensional Tetris — these visions could soon become reality in the automobile.

Head-up displays of the type already in the marketplace can project their information within a limited space. In contrast, in the full-electric Volkswagen ID.3*, which is to be sold from 2020 onwards, information will be projected into the driver's field of vision, with direct links to the driver's environment, via an augmented reality head-up display.

In future generations of head-up displays, three-dimensional presentations will even merge seamlessly with the environment, allowing innovative display concepts both in the distance and near to the driver. In future, conventional dashboards may become obsolete and vehicles may be controlled via virtual switches and displays. All occupants would be able to use "touchable" three-dimensional displays with natural vision for information or interaction.

Research in this area is being carried out by the company SeeReal Technologies and is progressing in a highly promising way. The Head of Volkswagen Group Innovation, Dr. Axel Heinrich, says: "Augmented reality will be a key component in future mobility and interaction concepts. This is why we are focusing on key technologies such as holography which will present this new reality

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in a fascinating way. We will be providing the automotive requirements for this exciting project and the know-how in 3-D technology will be contributed by SeeReal."





SeeReal in Dresden: There is also research on head-up displays with augmented reality technology. This is an important field of research for the Volkswagen Group.

Prototypical technologies are being developed in the laboratories of SeeReal in Dresden.

Research cooperation between Volkswagen Group Innovation and the technology company, with locations in Dresden and Luxembourg, already started at the end of 2018.

The CEO of SeeReal Technologies S.A., Bo Krøll, says: "Automotive applications and interaction solutions for drivers and passengers represent a significant market potential for SeeReal holographic display technology. The current cooperation, which combines Volkswagen's technology and market leadership with SeeReal's unique holographic display technology, will be further strengthened by Volkswagen's investment in SeeReal."

*) ID.3 – The vehicle is not yet available for sale in Europe

Note:

This text is available at: www.volkswagen-newsroom.com.

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About the Volkswagen Group:

The Volkswagen Group, with its headquarters in Wolfsburg, is one of the world's leading automobile manufacturers and the largest carmaker in Europe. The Group comprises twelve brands from seven Europan countries: Volkswagen Passenger Cars, Audi, SEAT, ŠKODA, Bentley, Bugatti, Lamborghini, Porsche, Ducati, Volkswagen Commercial Vehicles, Scania and MAN. The passenger car portfolio ranges from small cars all the way to luxury-class vehicles. Ducati offers motorcycles. In the light and heavy commercial vehicles sector, the products include ranges from pick-ups, buses and heavy trucks. Every weekday, 664,496 employees around the globe produce on average 44,567 vehicles, are involved in vehicle-related services or work in other areasof business. The Volkswagen Group sells its vehicles in 153 countries.

In 2018, the total number of vehicles supplied to customers by the Group globally was 10,8 million (2017: 10,7 million). The passenger car global market share was 12.3 per cent. In Western Europe 22.0 per cent of all new passenger cars come from the Volkswagen Group. Group sales revenue in 2018 totalled €235.8 billion (2017: €231 billion). Earnings after tax in 2017 amounted to €17.1 billion (2017: €11.6 billion).