



**North America  
International Auto Show  
Detroit, MI**

Mikael Bratt – President & CEO Autoliv

January 16, 2019

Saving more lives





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This presentation 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/or 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. In some cases, you can identify these statements by forward-looking words such as “estimates”, “expects”, “anticipates”, “projects”, “plans”, “intends”, “believes”, “may”, “likely”, “might”, “would”, “should”, “could”, or the negative of these terms and other comparable terminology, although not all forward-looking statements contain such words. Because these forward-looking statements involve risks and uncertainties, the outcome could differ materially from those set out in the forward-looking statements for a variety of reasons, including without limitation, changes in light vehicle production; fluctuation in vehicle production schedules for which the Company is a supplier, changes in general industry and market conditions or regional growth or decline; changes in and the successful execution of our capacity alignment, restructuring and cost reduction initiatives and the market reaction thereto; loss of business from increased competition; higher raw material, fuel and energy costs; changes in consumer and customer preferences for end products; customer losses; changes in regulatory conditions; customer bankruptcies, consolidations, or restructurings; divestiture of customer brands; unfavorable fluctuations in currencies or interest rates among the various jurisdictions in which we operate; component shortages; market acceptance of our new products; costs or difficulties related to the integration of any new or acquired businesses and technologies; continued uncertainty in pricing negotiations with customers; successful integration of acquisitions and operations of joint ventures; successful implementation of strategic partnerships and collaborations; our ability to be awarded new business; product liability, warranty and recall claims and investigations and other litigation and customer reactions thereto; (including the resolution of the Toyota recall); higher expenses for our pension and other postretirement benefits, including higher funding requirements for our pension plans; work stoppages or other labor issues; possible adverse results of pending or future litigation or infringement claims; our ability to protect our intellectual property rights; negative impacts of antitrust investigations or other governmental investigations and associated litigation relating to the conduct of our business; tax assessments by governmental authorities and changes in our effective tax rate; dependence on key personnel; legislative or regulatory changes impacting or limiting our business; political conditions; dependence on and relationships with customers and suppliers; and other risks and uncertainties identified under the headings “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Reports and Quarterly Reports on Forms 10-K and 10-Q and any amendments thereto. 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 publicly or revise any forward-looking statements in light of new information or future events, except as required by law.

*(\*) Non-US GAAP reconciliations are disclosed in our regulatory filings available at [www.sec.gov](http://www.sec.gov) or [www.autoliv.com](http://www.autoliv.com)*

# North American International Auto Show

## 2019 Vehicles of the Year



Hyundai Kona/Kona EV



Genesis G70



RAM 1500

# Vehicle Models Debuted at NAIAS'19

where Autoliv products are well represented



Ford Explorer



Cadillac XT6



RAM 3500



Kia Telluride



# Uniquely Positioned to Save More Lives

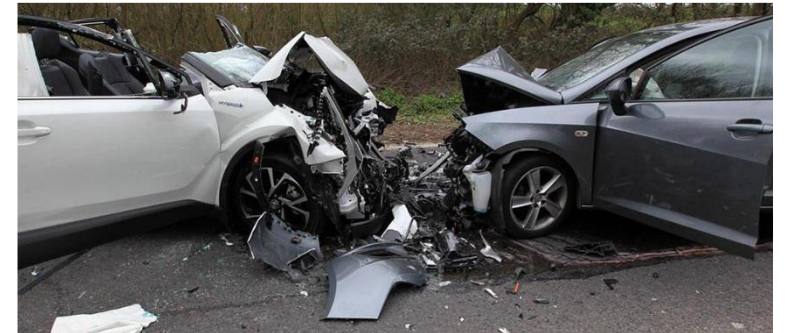
Continuous innovation to reduce global traffic fatalities



Focus on Real Life Safety

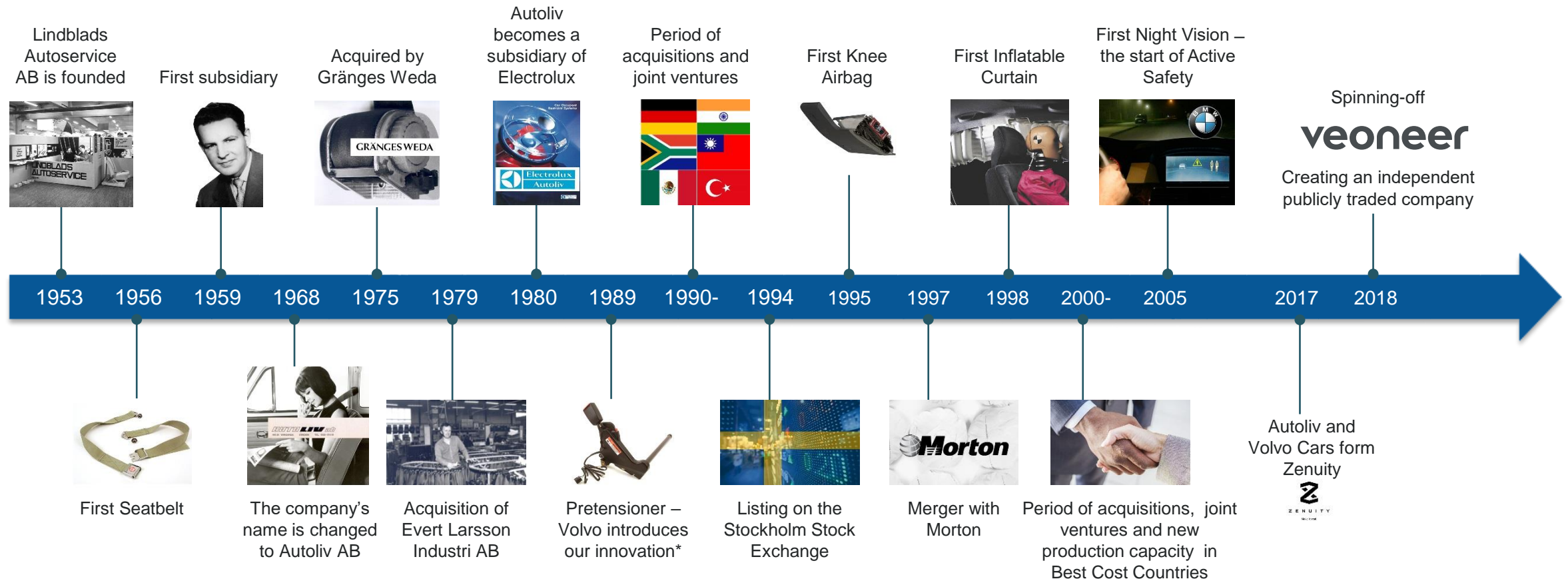


More sophisticated safety solutions for future autonomous and electric vehicles



# Autoliv – 65 years of Dedication to Saving Lives

## Entering the next phase





# Autoliv 2018 milestones

Autoliv and Veoneer to pursue respective growth opportunities separately

- **New executive management team** from April
- **Veoneer spin-off** in July
  - Improved focus and flexibility for both companies (culture, people, business)
  - Improved investor choice
  - Increased debt for Autoliv
- **Above market growth** reported first nine months supported by strong order intake since 2015
- **Continued strong order intake** reported first nine months
- **Light vehicle market in China** under pressure in second half year
- **New emission test protocol in Europe** with volatile light vehicle production in second half year

# Autoliv Today is Stronger Than Ever

MARKET SHARE 2018

**40%**

worldwide, clear #1

ORDER INTAKE

**> 50%**

of global orders 2017A

SALES

**\$8.6 Bn**

LTM

ADJ. OPERATING INCOME<sup>(1)</sup>

**922 Mn**

LTM (10.7% margin)

OPERATIONS IN

**27**

countries

DAILY PRODUCTION

**~ 1 Mn**

units

EMPLOYEES

**> 66,000**

worldwide

FREE CASH FLOW<sup>(2)</sup>

**\$403 Mn**

2017A (70% cash conv.<sup>(3)</sup>)

## Essential Product Portfolio for Saving Lives Today

Airbags



Seatbelts



Steering Wheels



Special Products



(1) Non-US GAAP measure, please refer to 8-K from May 31, 2018 for reconciliation. Adjusted for capacity alignments and antitrust related matters

(2) Defined as Operating Cash Flow less Capital Expenditures, net

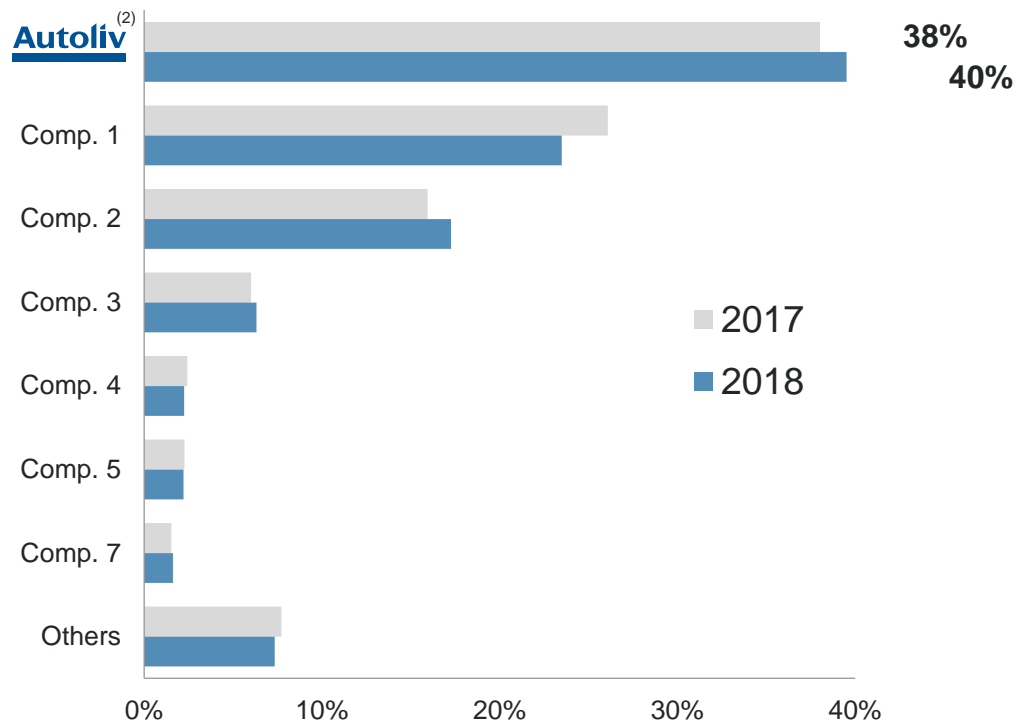
(3) Defined as Free Cash Flow/ Net Income

# Strong starting point

Clear market leader in a consolidated market

## Firm Market Leader at 40% – Far Exceeding Competitors<sup>(1)</sup>

%



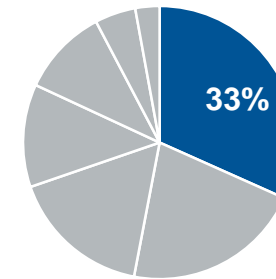
(1) Estimated market shares. Based on Autoliv's passive safety market definition including airbags, seatbelts and steering wheels

(2) Pro forma combination

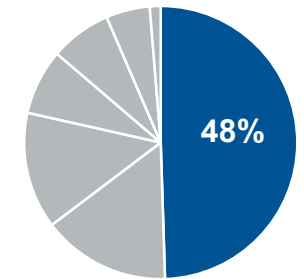
## #1 Rankings Across Product Portfolio<sup>(1)</sup>

2018A

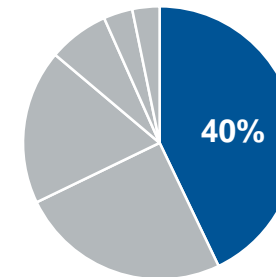
Frontal Airbags



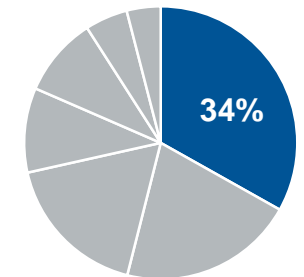
Side Airbags



Seatbelts



Steering Wheels


















# Well-Balanced Customer Base

Significant Presence in High-Growth Markets

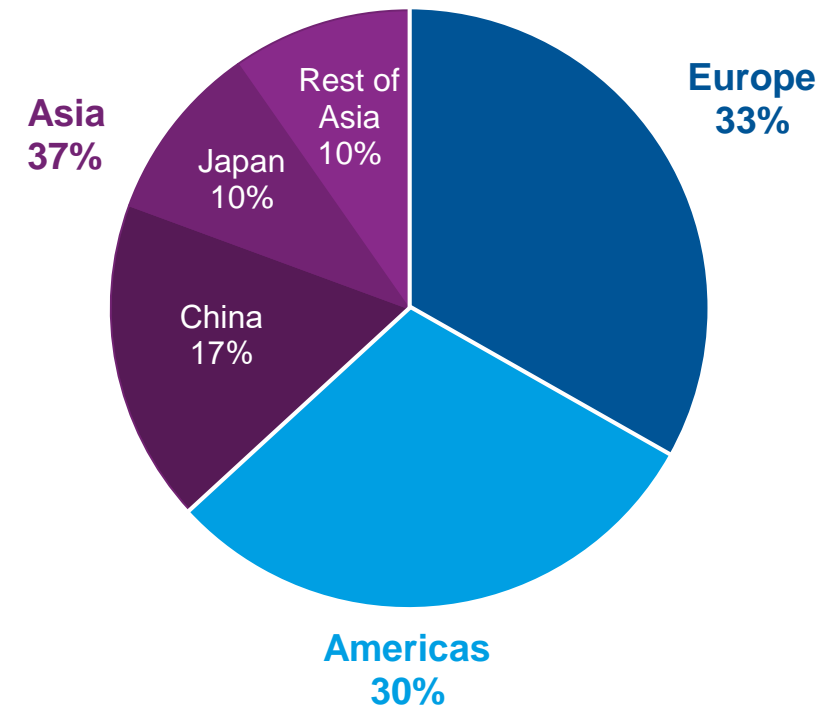
## Serving All Major OEMs...

% of 2017A Revenue<sup>(1)</sup>

 15%	 5%
RENAULT NISSAN MITSUBISHI	
 10%	 4%
FORD	BMW GROUP
 9%	 4%
VOLKSWAGEN AKTIENGESELLSCHAFT	PSA GROUPE
 9%	 2%
HYUNDAI / KIA MOTORS	MAZDA
 7%	 2%
TOYOTA	VOLVO
 7%	 2%
FCA FIAT CHRYSLER AUTOMOBILES	长城汽车 Great Wall Motors
 7%	 2%
HONDA The Power of Dreams	LAND-ROVER / JAGUAR
 6%	Others 9%
DAIMLER	

## ...Across All Key Automotive Regions

% of 2017A Revenue<sup>(1)</sup>

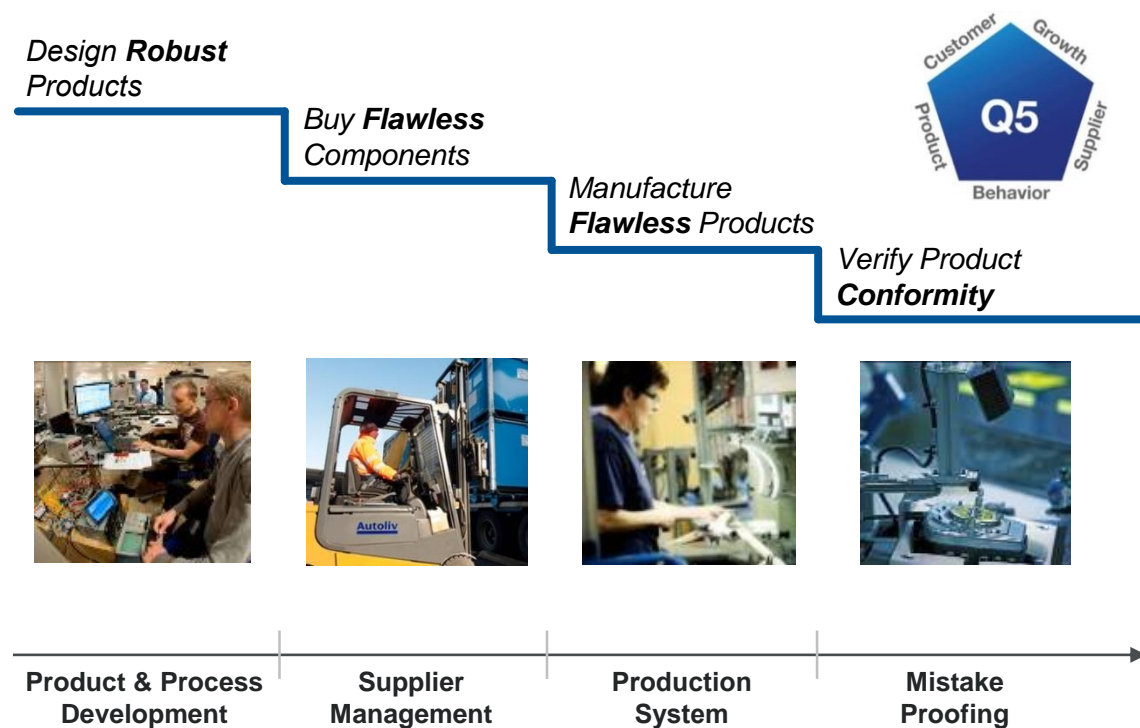


(1) Pro forma of M&A transactions amongst OEMs, including PSA's acquisition of Opel/ Vauxhall from General Motors and Nissan's stake purchase in Mitsubishi

# Highest Reliability and Industry-Leading Quality Standards

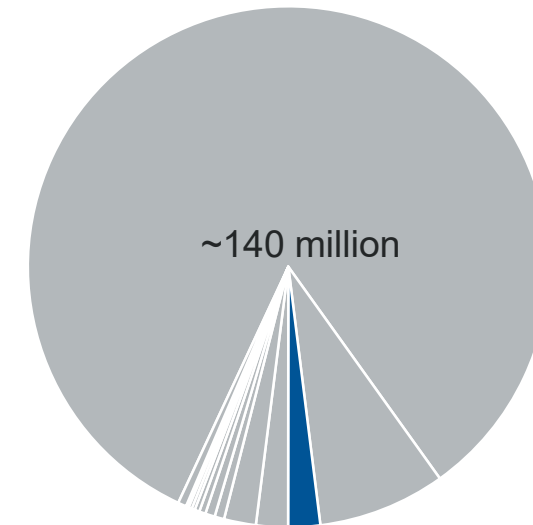
“Zero Defects by Flawless Execution”

## Relentless Focus on Quality Through Q5 Program...



## ...& Minimal Recalls

Share of Global Recalls since 2010<sup>(2)</sup>



**Autoliv**  
**2%**  
**vs. 38%**  
**Market Share<sup>(3)</sup>**

(1) Failure to meet intended state and/or specification

(2) Scope: Recalls related to Passive Safety in Japan, Canada, US, China, South Korea, Australian, EU, UK, DE; 2010-01-01 to 2018-06-30

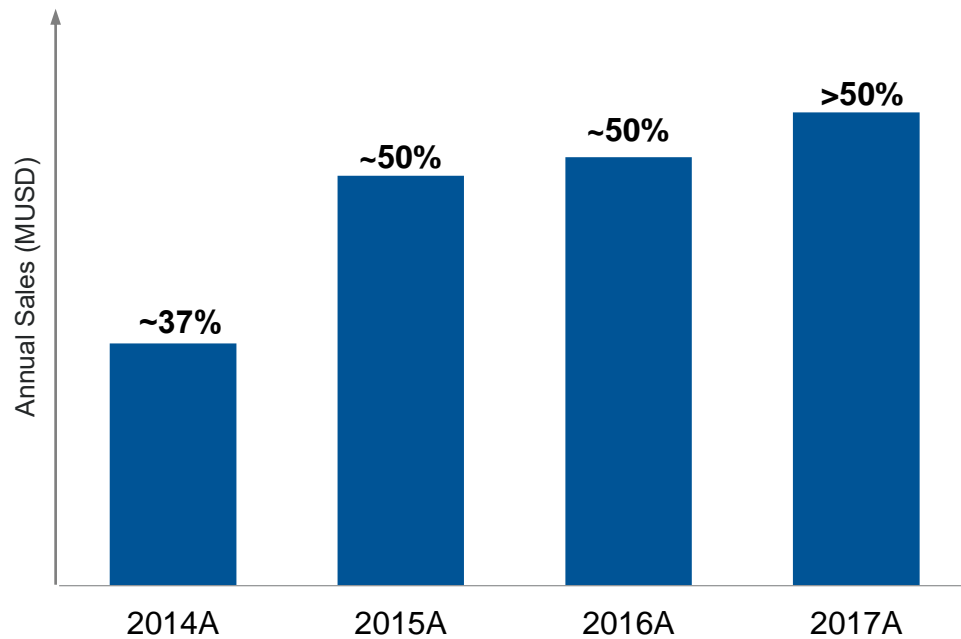
(3) Estimated 2017A market shares

# Strong order intake

Order Intake Tailwind Driving Sales Growth and Market Share Gains

## Strong Order Momentum...

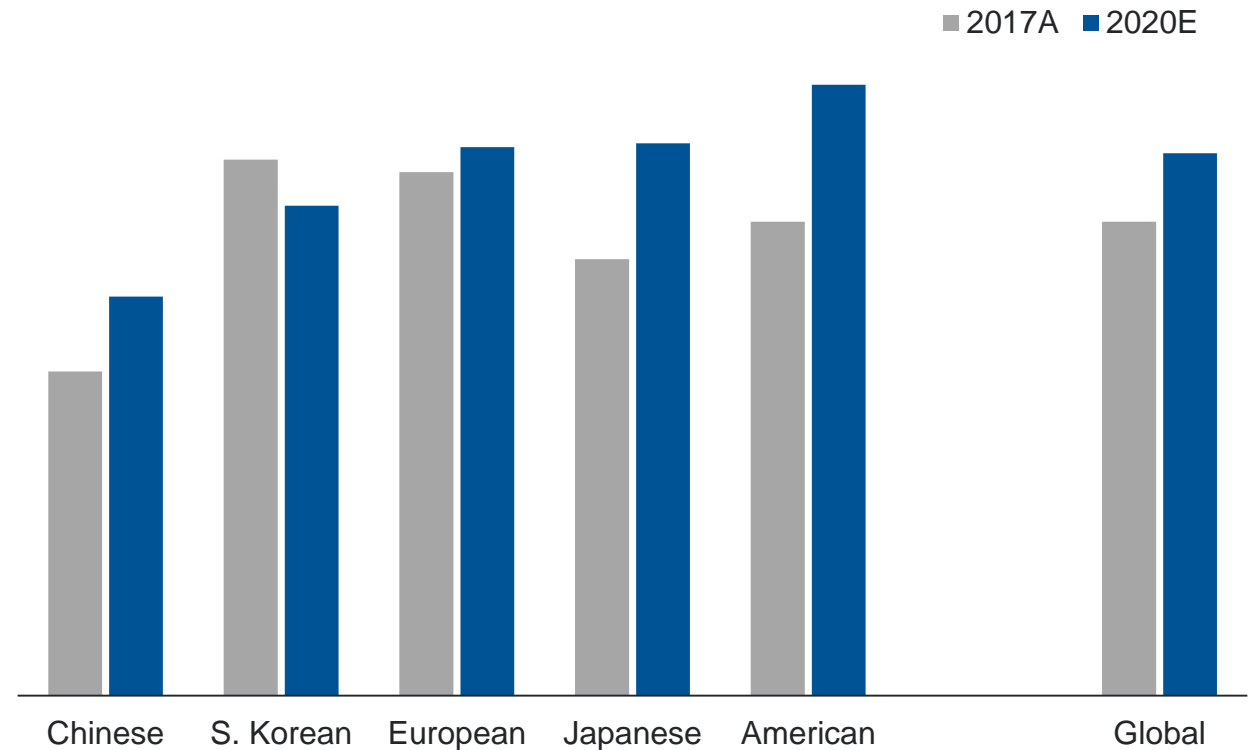
Order Intake Annualized Sales and Share of total awards; 2014A-17A



(1) Based on to IHS' LVP (Light Vehicle Production) outlook as of April, 2018.

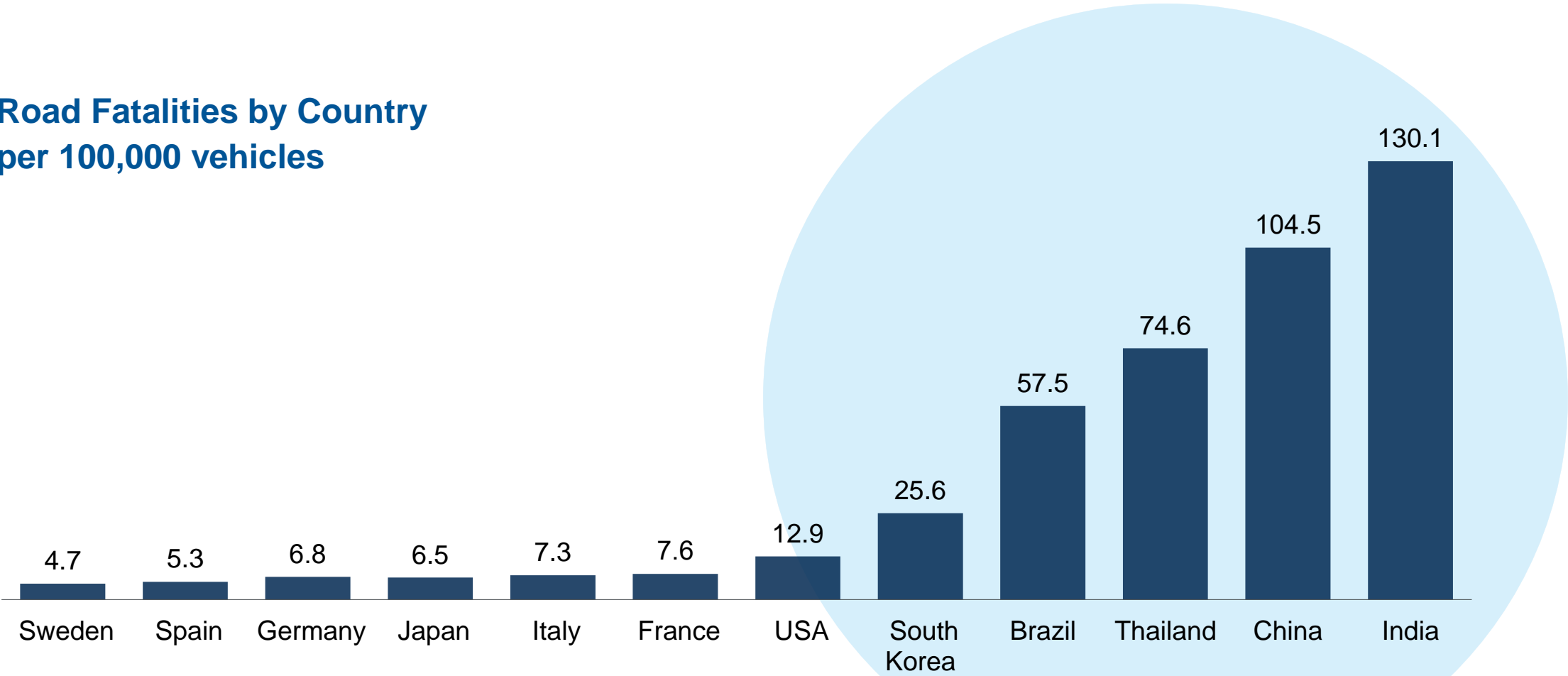
## ... bringing Broad Market Share by Brand Origin Improvement

%



# Significant traffic safety improvement potential

Road Fatalities by Country per 100,000 vehicles



Sources: WHO Global Status Report on Road Safety 2015  
Published in 2015 Based on Data Collected in 2013 (Latest Available Data)

# Saving More Lives & Creating Sustainable Growth

## Customer Partnership

- Key customer partnerships give us an **advantage**, especially when there are new challenges.

## Influence

When our innovation is proven efficient:

- Government (Regulation)
- NCAP ratings

## New Technology

- Disrupt market with new technology

## Accident Research

- Understand how people get hurt → New Solutions

## Anticipate Market Trends

- HAD / ADAS
- Possibilities with new sensors





# R&D Priorities

New Restraint Considerations = Current Occupant Safety Requirements + More

## ADAS & AD



### Main Challenge: New seating positions

- ✓ Safety solutions more complex: Need to adapt to new & varying seating positions
- ✓ Safety integrated on seats

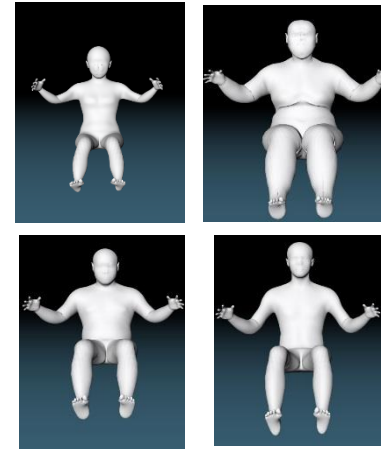
## Electrification



### Main challenges: Weight & noise

- ✓ New materials development
- ✓ Electrical solutions
- ✓ New quieter products
- ✓ Battery cut-off switches

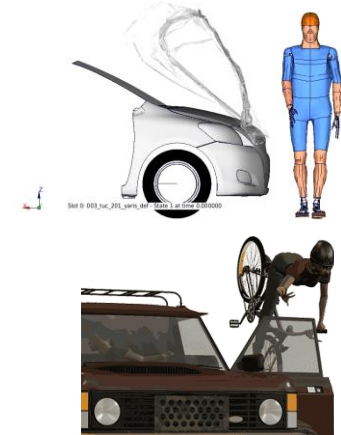
## Adaptability to Size & Age of Occupant



### Adaptability of restraint systems

- ✓ Personalized restraint system
- ✓ Occupant diversity
- ✓ Child protection

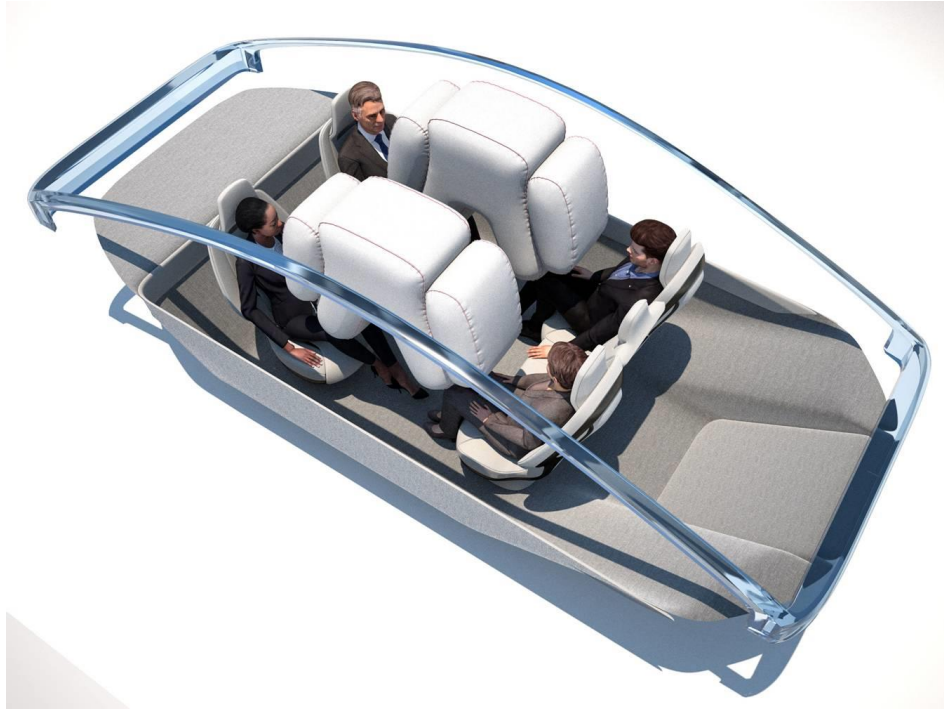
## and more...



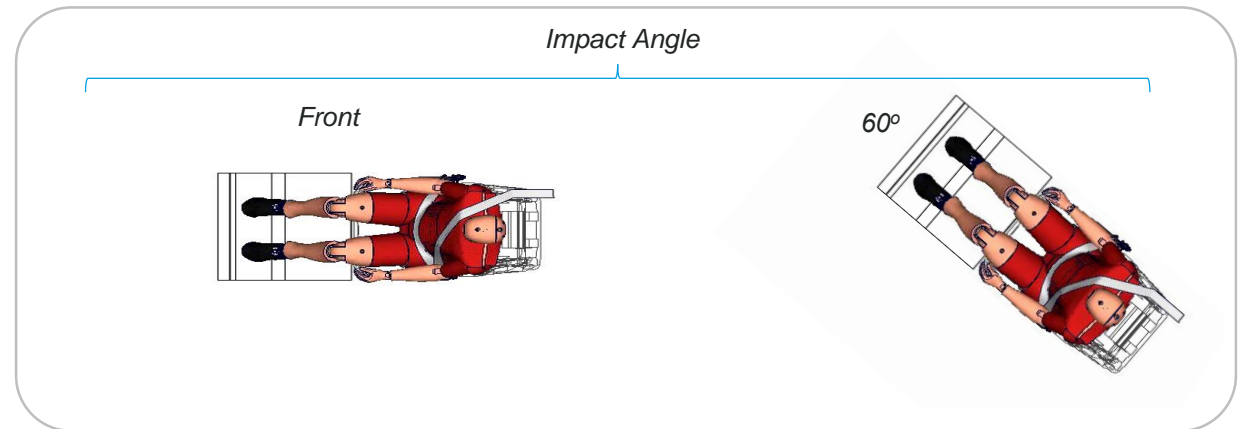
### Protection of:

- ✓ Pedestrians
- ✓ Cyclist
- ✓ Powered two-wheelers
- ✓ Others

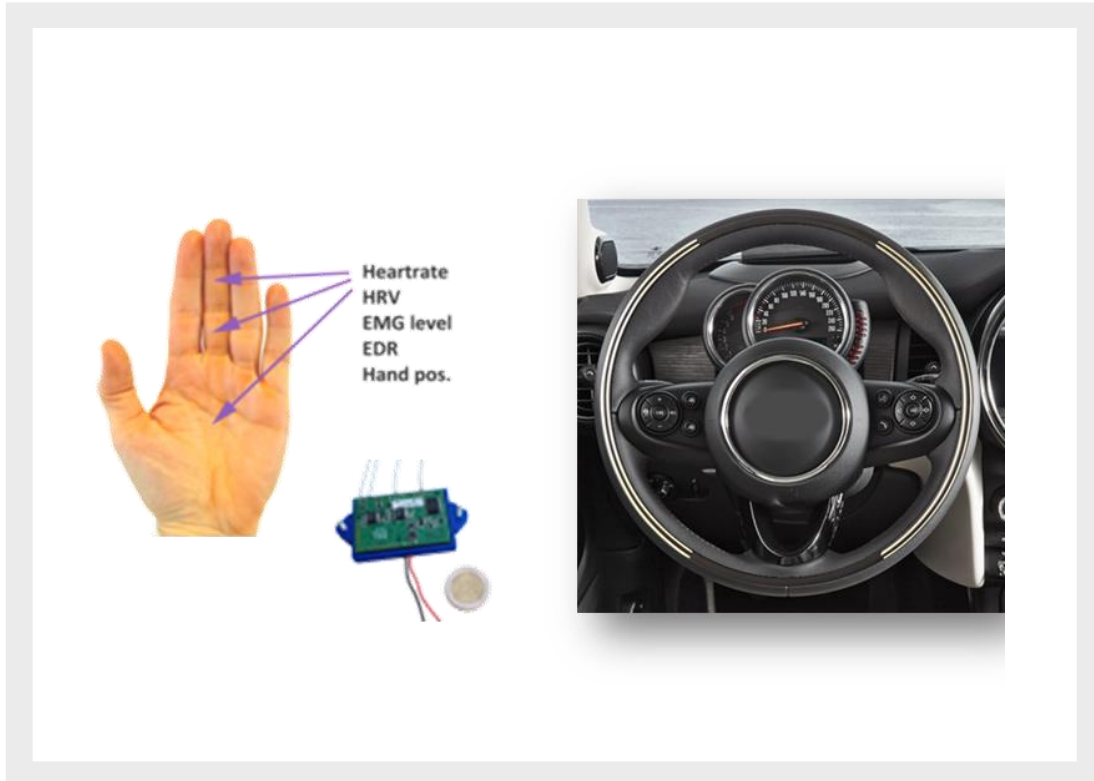
# Research/Technology 2025+



Collaborate with OEMs and other Tier 1 to develop new airbags and seat belt systems for automated vehicles



# Research/Technology 2025+



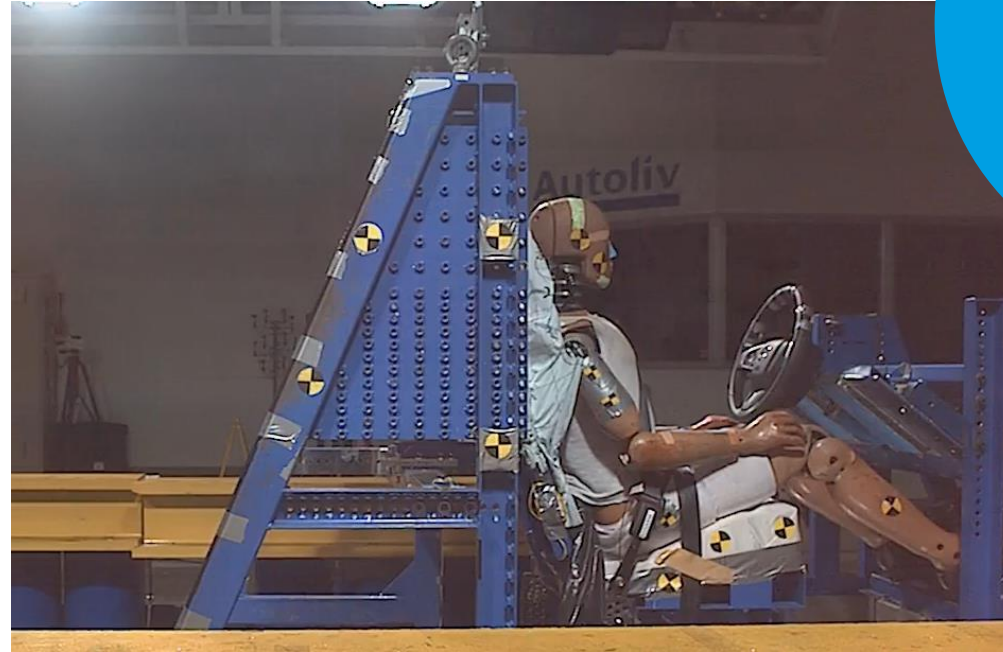
Integrated sensing for Hands On Detection,  
Vital Sign Measurement and HMI



HMI for automated driving including Steer by  
Wire and Stowable Steering

# LifeCell 360 Airbag

- Extension of LifeCell for side impact concept.
- Protection for all impact directions



Example:  
Frontal impact  
35 mph (USNCAP)  
in conventional  
seating position

# Introducing Driving Avatar



- **Safety Score** uses your smartphone to help you become a safer driver.
- By monitoring real-time:
  - Acceleration
  - Speed
  - Braking
  - Turning
  - Phone use

Autoliv's proprietary data algorithms and known causes of accidents provides a **personal safe driving score**.

- The driver can review data and learn how **to become a safer driver** by changing driving behavior and habits.

# Introducing Driving Avatar



- The **individual driving score** can be used by:
  - ride-hailing services
  - taxi, limousine and other fleet and professional driving companiesto provide an unbiased picture of drivers' safe-driving habits and provide a platform for evaluating and improving behavior.
- Additionally, a personalized Safety Score could also be used to **reduce insurance costs**.

# Innovating to support Electrification of vehicles

Innovation Within Current Portfolio

## Reducing Weight and Size



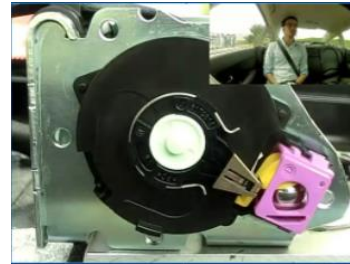
### Pre-Pretensioner

- ✓ Mechatronics integration
- ✓ mass and package reduction

### New Passenger Inflator

- ✓ Modular design
- ✓ Overall system cost reduction

## Reducing Noise



### Improved Seatbelt Designs

- ✓ Reduce noise levels of existing designs
- ✓ New Seatbelt designs

## Opportunities from more electrical power



### New Seatbelt Retractor

- ✓ 100% Electric Seat-belt Tensioning
- ✓ Improved adaptivity

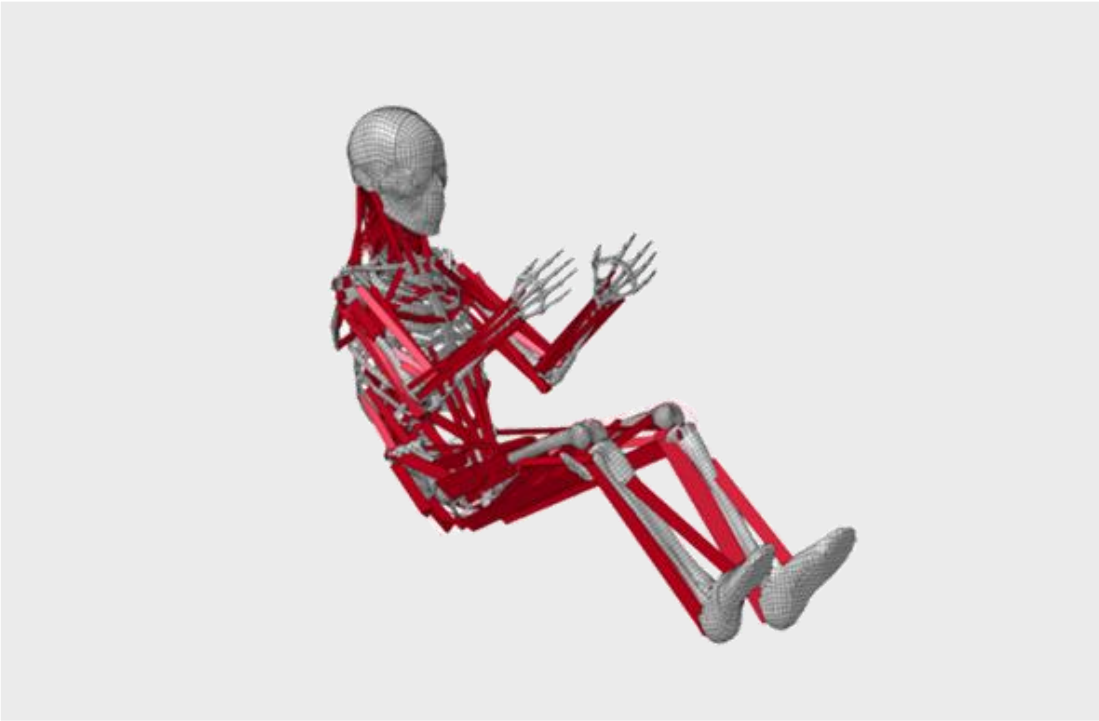
## Safeguard against fires caused by short-circuiting



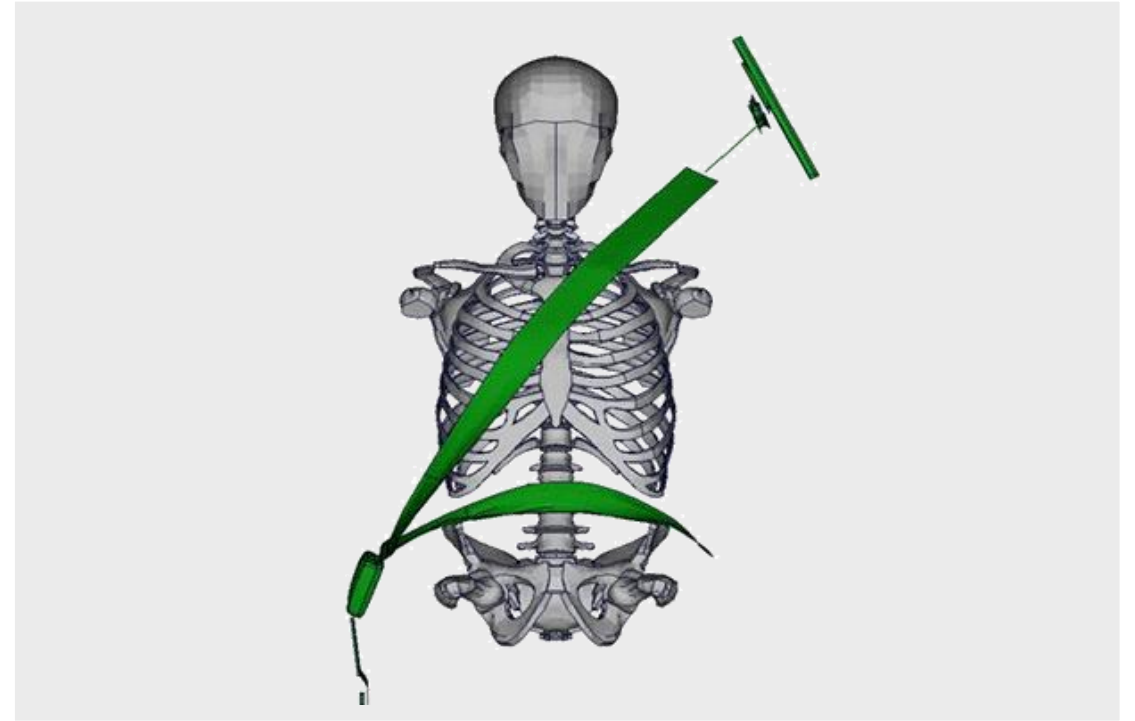
### Pyrotechnic Safety Switch

- ✓ Disconnects the batteries from the circuit board in less than a millisecond
- ✓ Uses proven airbag initiator technology

# Developing Adaptive Restraint Systems



Work with OEMs to increase usage and functionality of Human Body Models beyond standard crash dummies



Biometric/biomechanical studies with leading universities to predict brain injuries, rib fractures and thoracic injuries for all occupants



# Example: Countermeasures for the Fragile Population

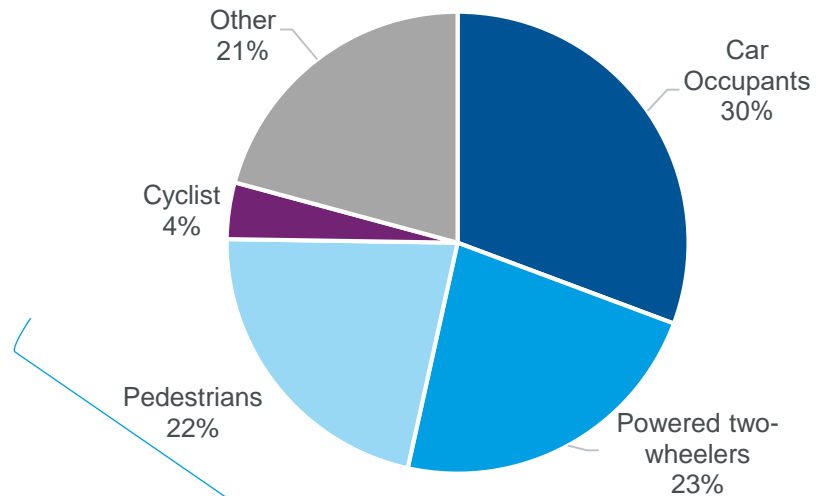


## Adaptability of restraint systems

- ✓ Personalized restraint system can reduce injuries by 10%-30%

# Vulnerable Road Users

Road traffic death by type road user\*



**Vulnerable Road users  
accounts for ~49% of all  
road fatalities**

\* Source: WHO

# Pedestrian Airbag Saves the Life of 12-year Old Boy



## Vulnerable road users and autonomous vehicles

- Protection of vulnerable road users key for acceptance of Autonomous vehicles
- OEMs and RoboTaxi companies show increased interest because when driving shifts from driver to machine, liability transfers from driver to corporation

# 2019 Focus

- Continue to Execute on Strong Order Book
- Product Launch Effectiveness
- Monitor and Manage Light Vehicle Market Volatility
- Secure Our New and Stronger Market Position
- Capital Market Day in Second Half Year
- Save More Lives



A man's face is reflected in the side mirror of a car, looking forward. The background is a busy city street with tall buildings and blurred cars in motion.

Each year, Autoliv's  
products save over  
30,000 lives

[autoliv.com](http://autoliv.com)

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