TRUCK DESIGN ACTIVE SAFETY AND AWARENESS

Claes Avedal, Product Planning

Collaboration is key to prevent accidents





Priorities based on accident research





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Volvo Trucks. Driving Progress

Specific needs for different truck applications

Long Haul	City & Regional Distribution	Construction
Highways Smooth	City, suburban roads Smooth	City, suburban roads, off road sites Rough or very rough
Long shifts, few stops, overnight Long distances	Many deliveries Short distances	Several deliveries Short distances
> 40 tons, 400-750hp	7.5-26 tons, 210-350hp	> 26 tons, 330-540hp
Fuel eco, driving and living comfort	Entry & exit, visibility, load handling, manoeuvrability	Durability, driveability, agility, manoeuvrability
Large cabs, flat floor, high chassis	Day cabs, low chassis, close up visibility	Day cabs, high chassis, ground clearance, close up visibility



The right truck for the intended job Specific needs for different traffic situations

Long Haul

- High speed
- far ahead





The right truck for the intended job

City distribution

- low speed
- close-up visibility
- low eye position
- side window





The right truck for the intended job

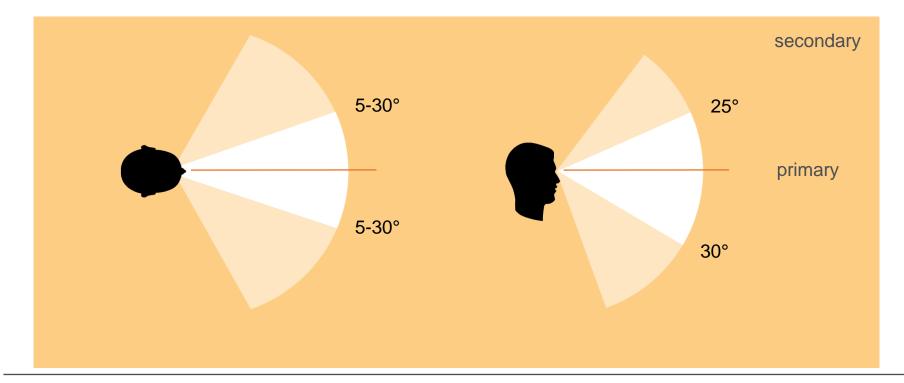
Cameras

- corner view
- rear view
- stitched combined view





Limitations of human eye



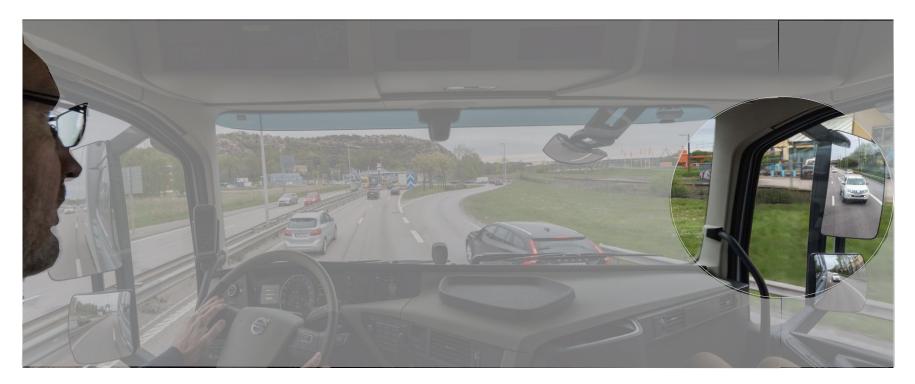




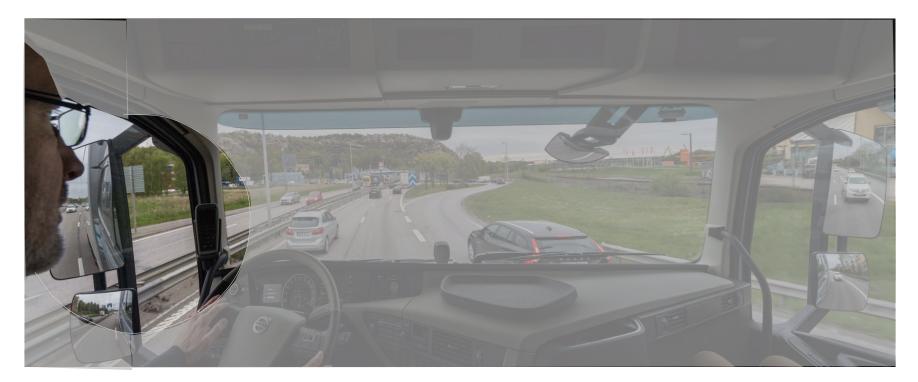














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Volvo Trucks. Driving Progress

Driver needs assistance in challenging traffic situations





Collision Warning with Emergency Brake





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Next step focus on low speed and city traffic

- Future solution
- Detecting pedestrians and cyclists
 <u>Ahead</u>
 - when starting from stationary
 - higher speeds

<u>Side</u>

- when turning







Extending the time horizon by communication





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Extending the time horizon by communication







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