




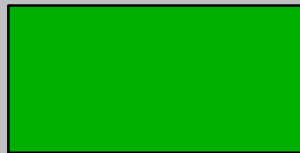


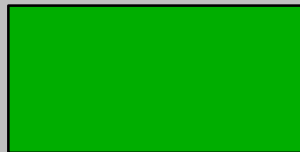


Active safety

<http://www.mvs.chalmers.se/~mys/ActiveSafety07.htm>

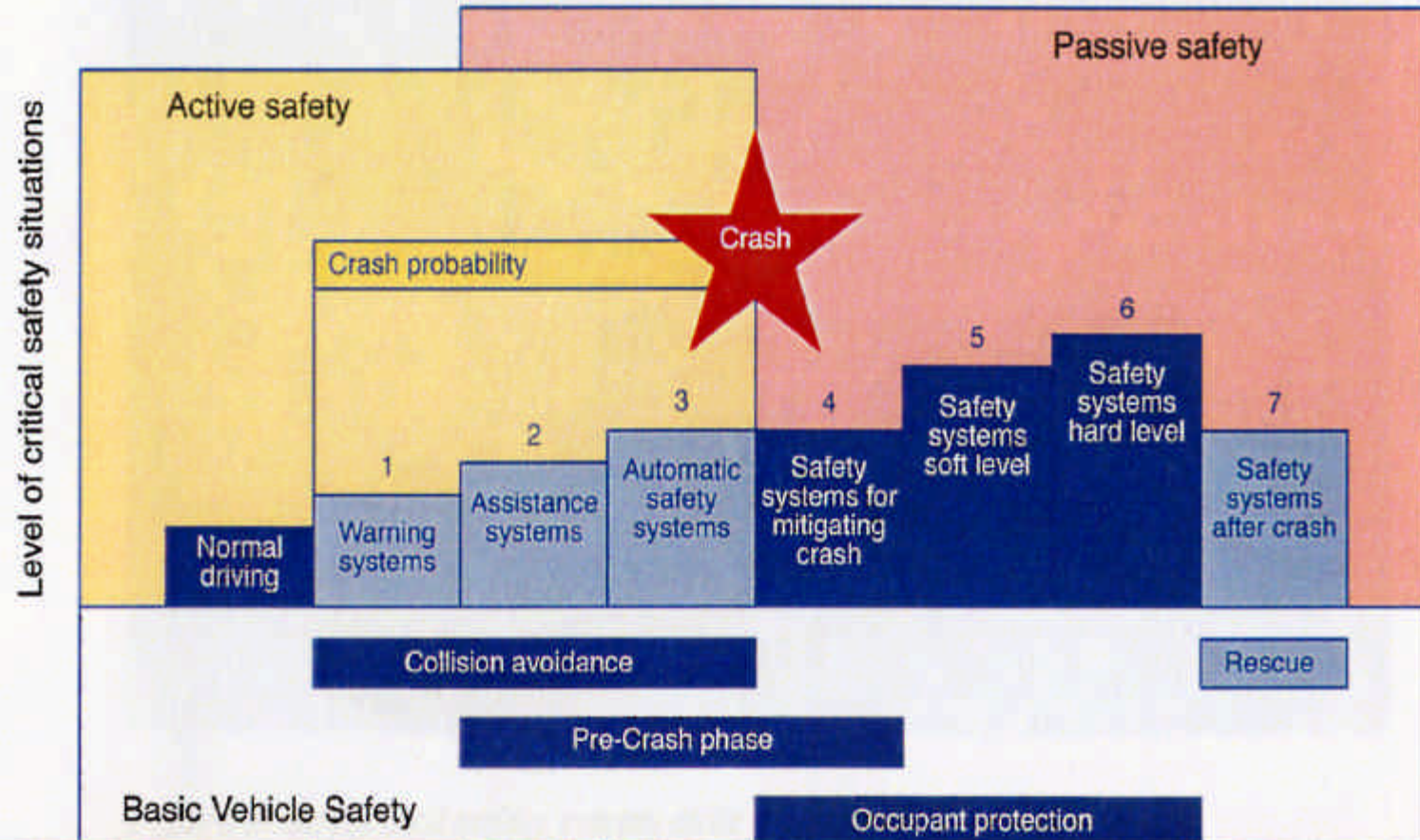
Safety

(Haddons matrix)

	<i>Pre Crash</i>	<i>Crash</i>	<i>Post Crash</i>
Man			
Vehicle			
Environment			

Holistic Safety Approach

(EUCAR)



Active safety

Lectures (this may be subject to updates)

Mats Svensson

Michael Ljung, Volvo Car / Chalmers

Stig Franzén, Francon-Arise / Chalmers

Björn Löfving, Volvo Car

Robert Broström, Volvo Car + tentative visit at lab

Yngve Håland and Jonas Bärghman, Autoliv

Hans-Erik Pettersson, VTI

Active safety

Projects

- **Groups of about 5 persons**
- **Carry out an investigation on a project topic**
- **Meetings with Mats Svensson (tentatively in weeks 13, 16 and 18)**
- **Make a review of the background, describe current situation**
- **Make a review of possible technical solutions**
- **Consider the different possible solutions and come up with recommendations of feasible future solutions. Discuss the benefits and potential problems with your recommended solutions. Explain why you excluded certain solutions.**
- **Final report on May 14. Presentations in smaller groups with comments from the other project groups on May 21 or 24**

Project 1

Remote Sensing systems (radars, cameras etc.) in vehicles for improved traffic safety .

Project 2

Active safety systems and the Interface between the Human – and the Vehicle in current and future road vehicles .

Project 3

Addressing active safety starting from Real World accident situations .

Active safety

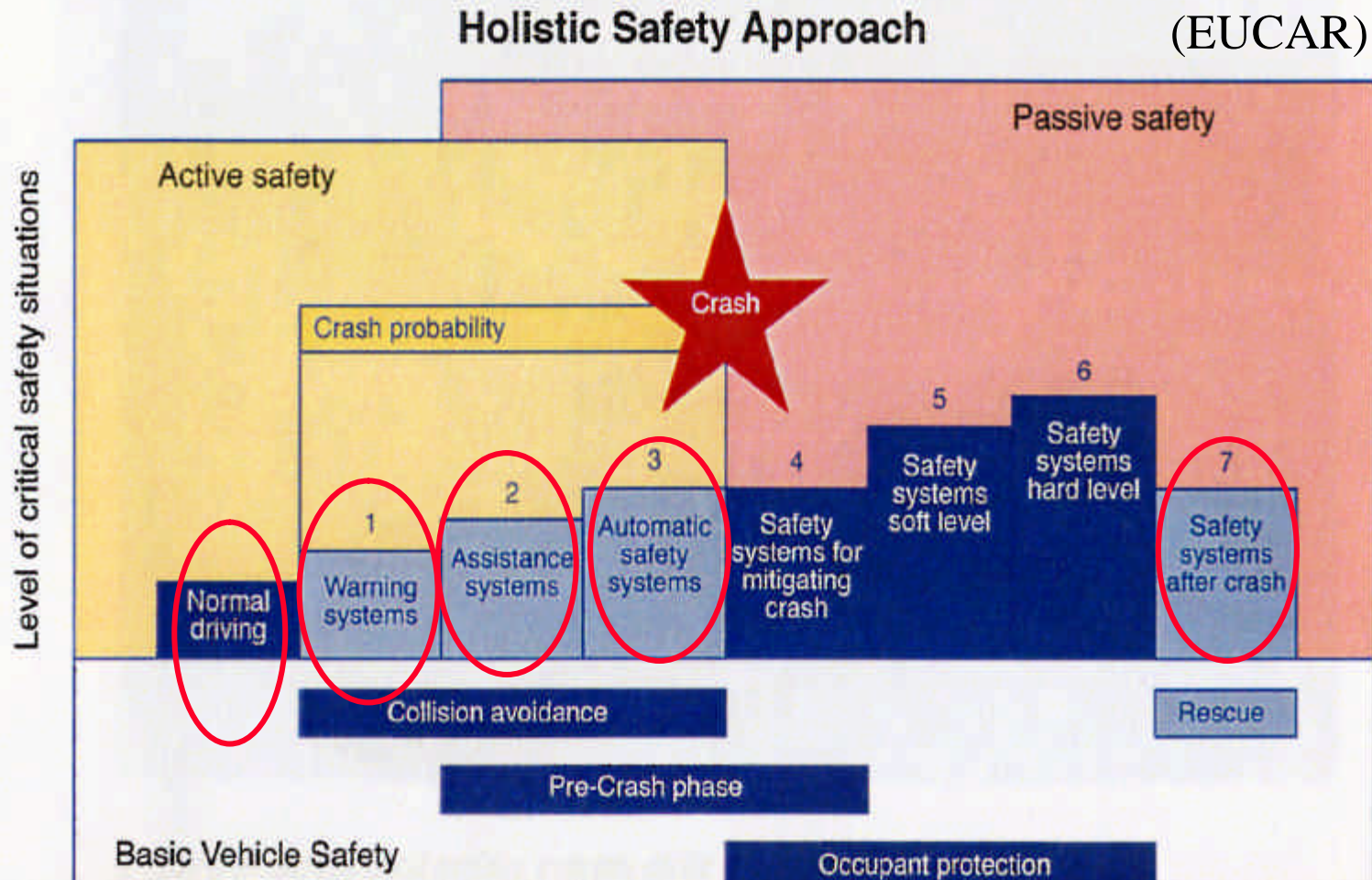
Project group supervision, March 22

Group 1: 10.00 – 10.45

Group 2: 10.45 – 11.30

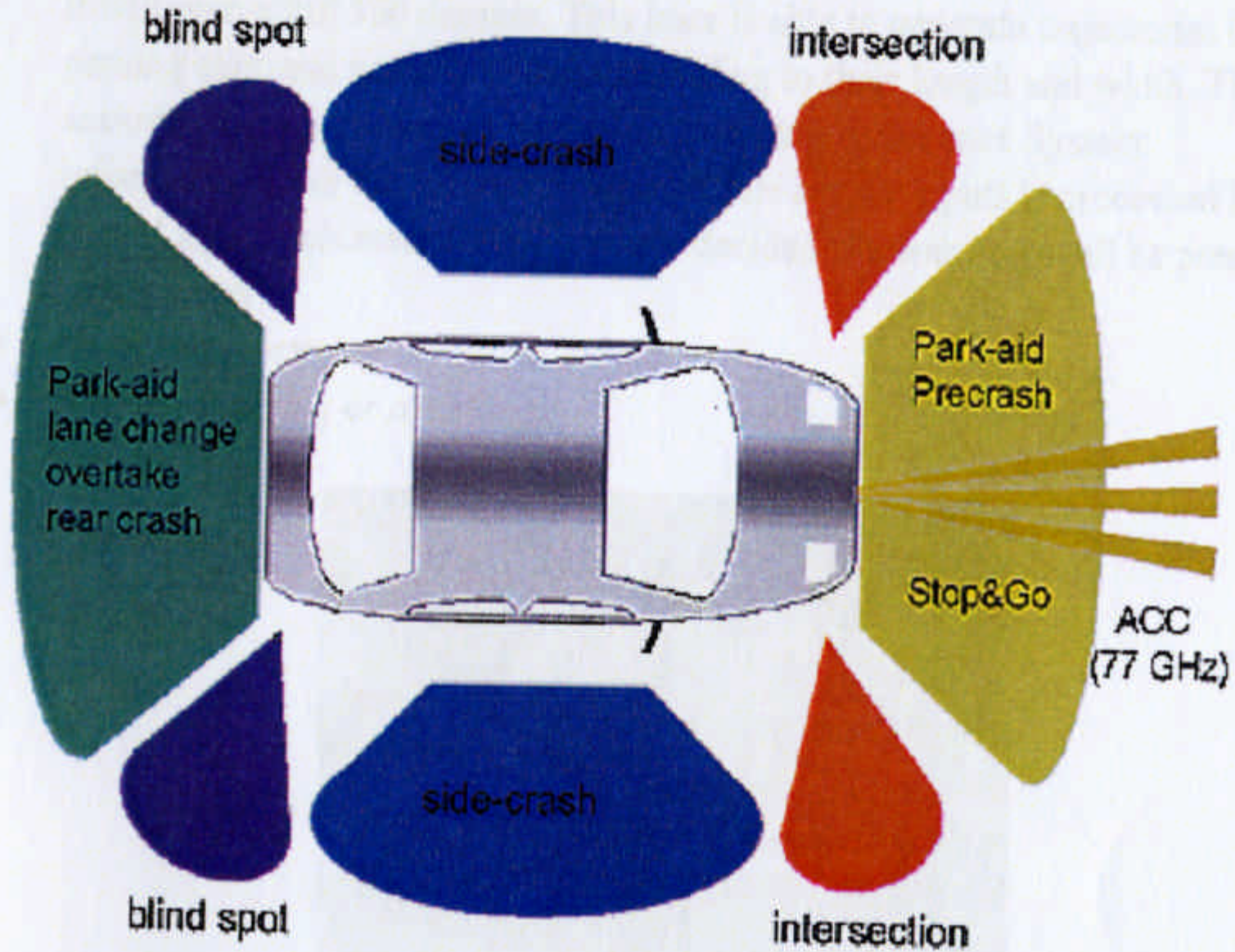
Group 3: 11.30 – 12.15

Hörsalsvägen 7a, Applied Mechanics, Vehicle Safety Div., Plan 2



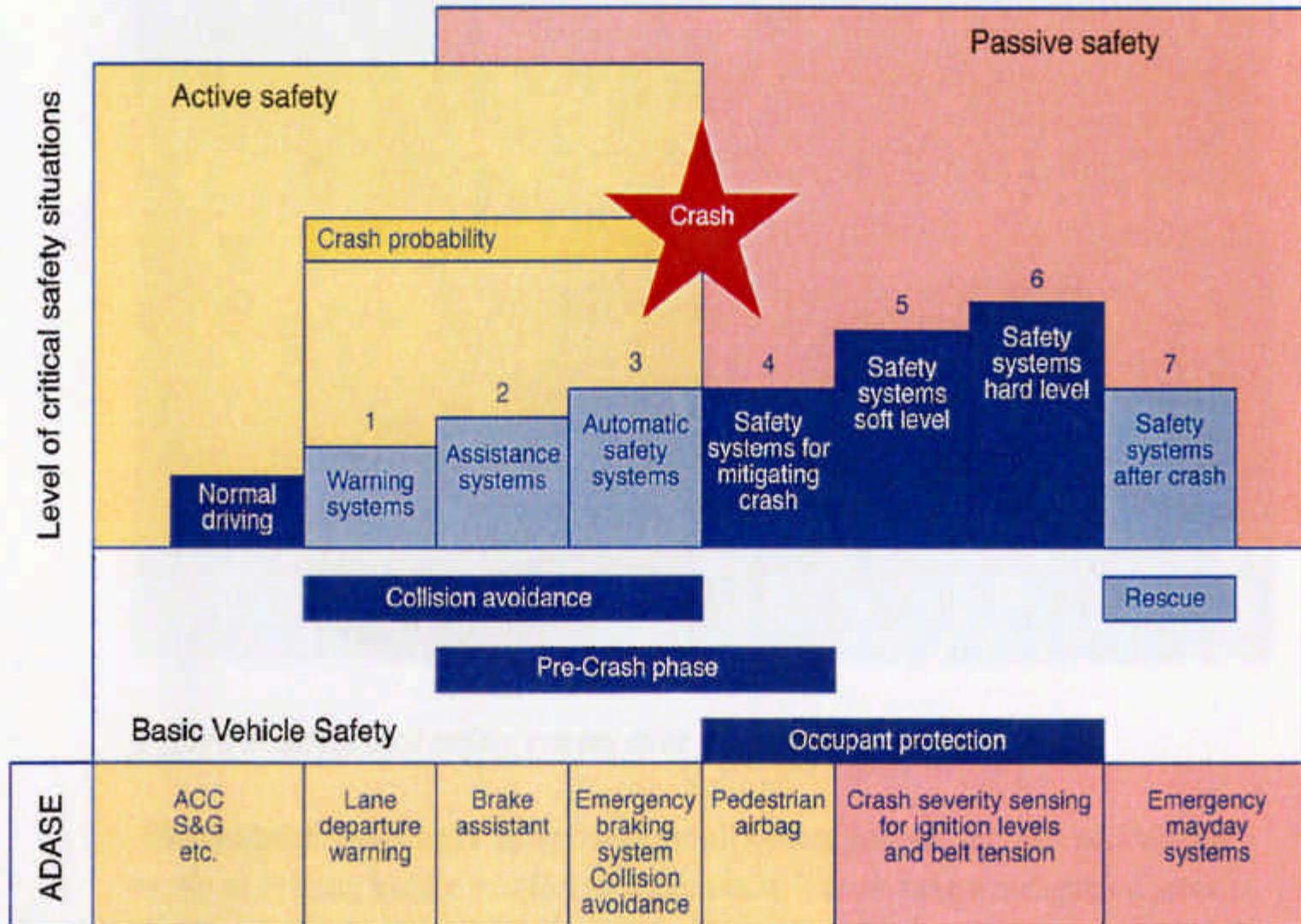
Consider the circled phases. Brain-storm around what type of aids, technical systems etc. that you imagine would be of help in these phases. The aim would be to prevent accidents or to reduce their consequences.

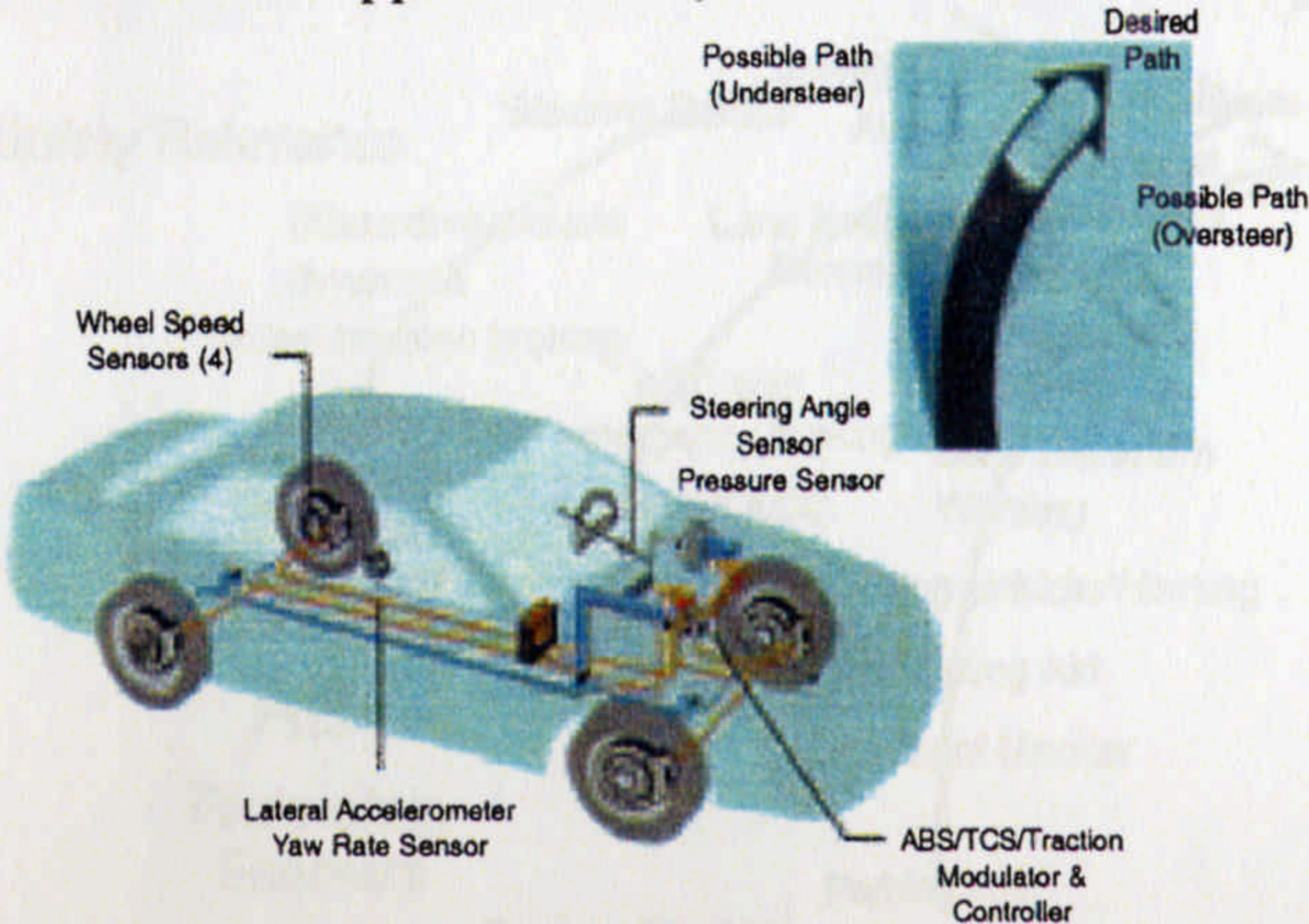
Radar System



Holistic Safety Approach

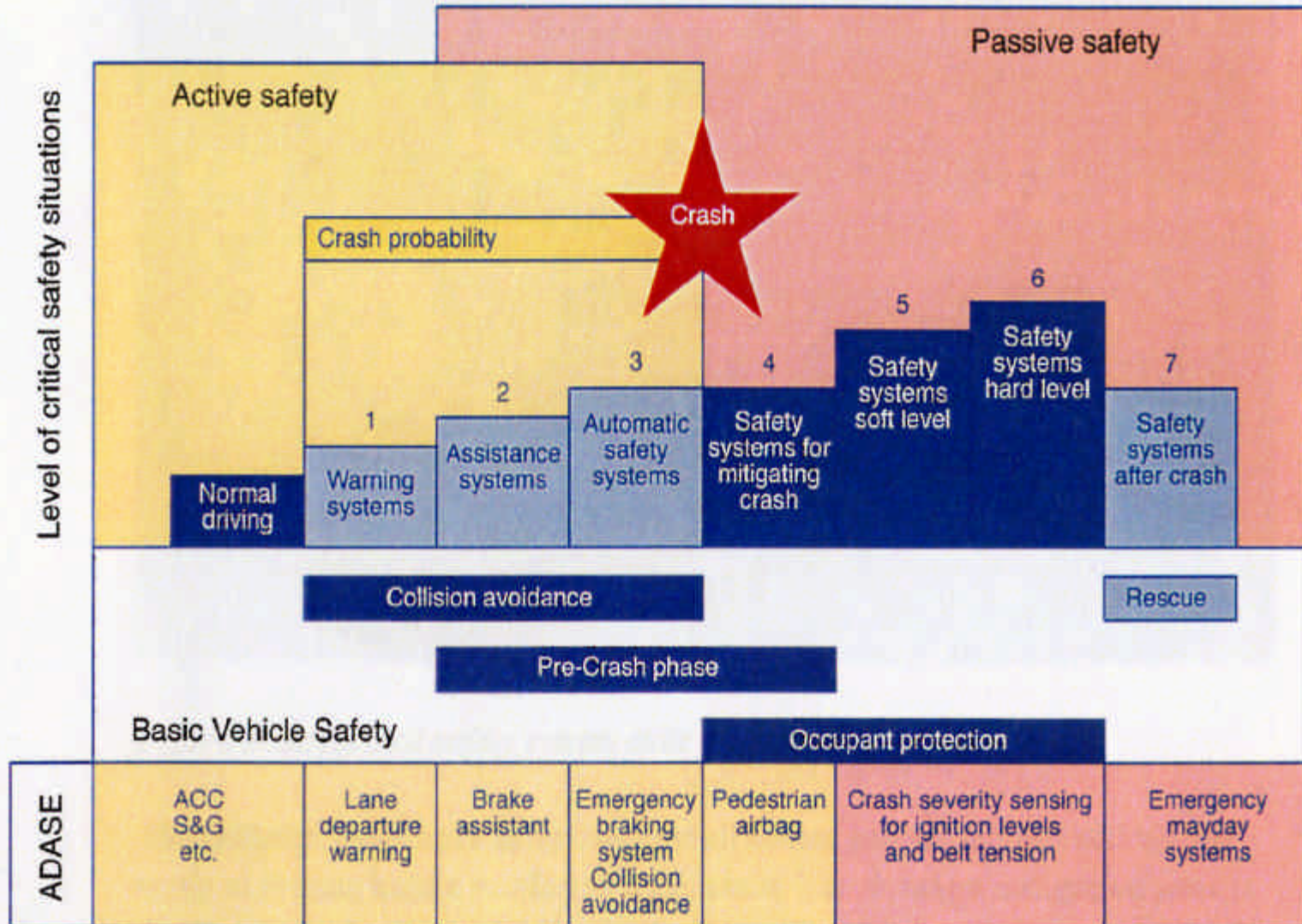
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Holistic Safety Approach

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Current safety systems, potential improvements

Collision Severity:

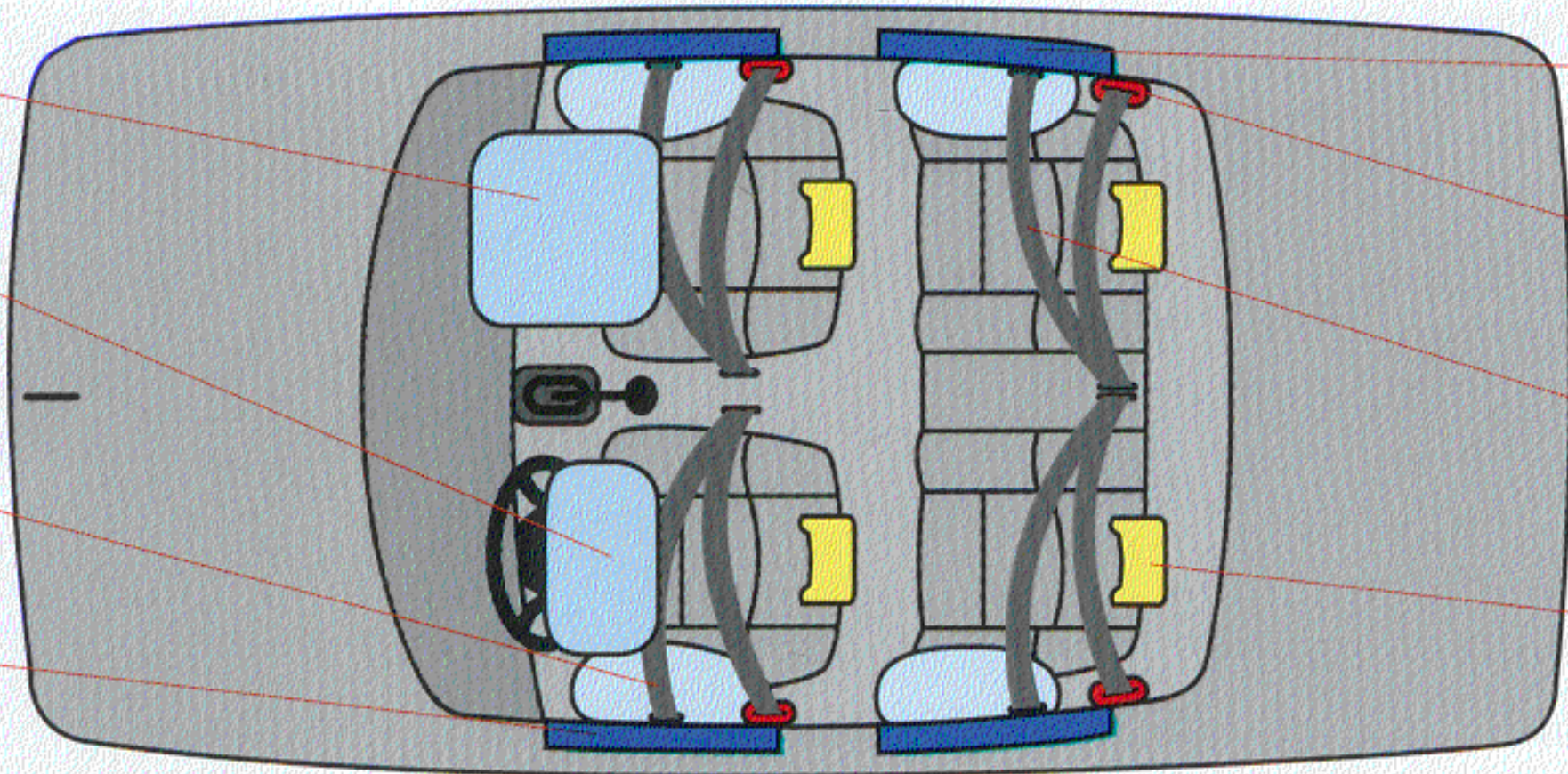
Delta V

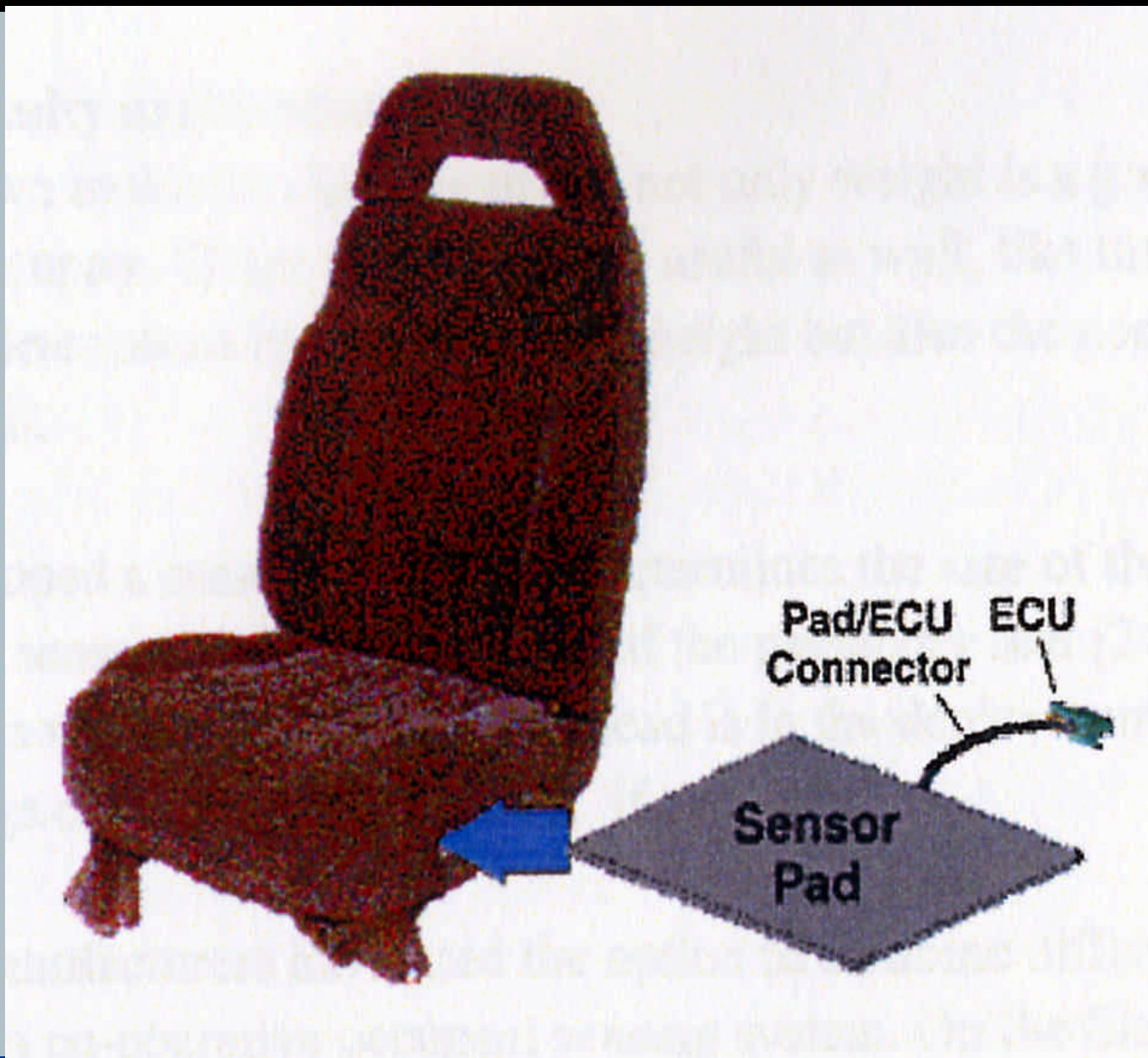
Acceleration

Occupant characteristics:

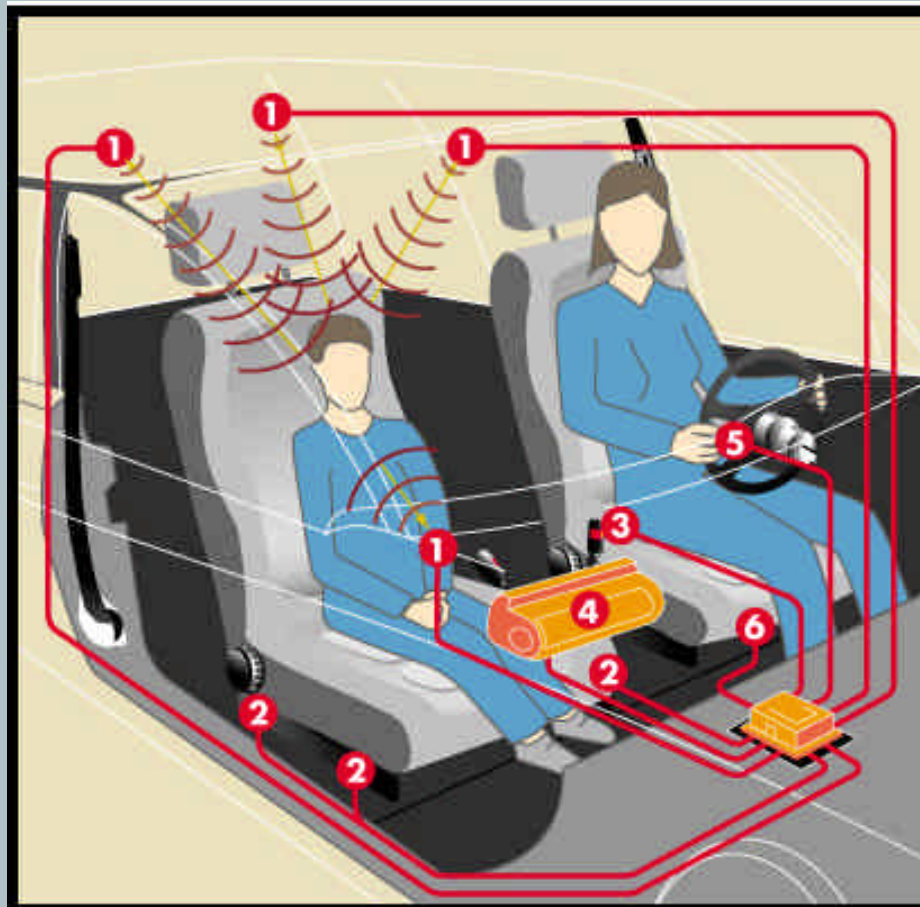
Age / Gender / Size

Out-of-position



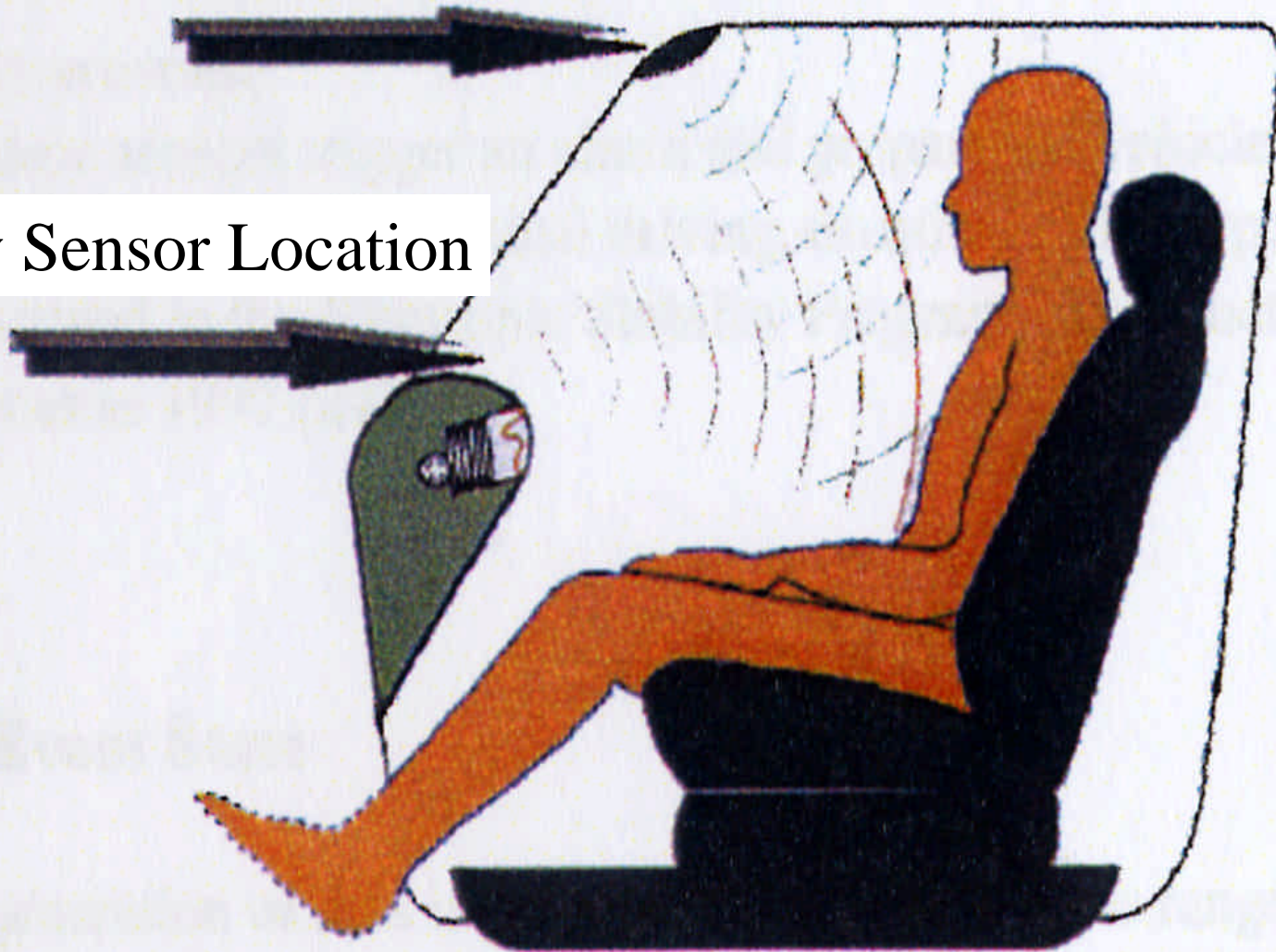


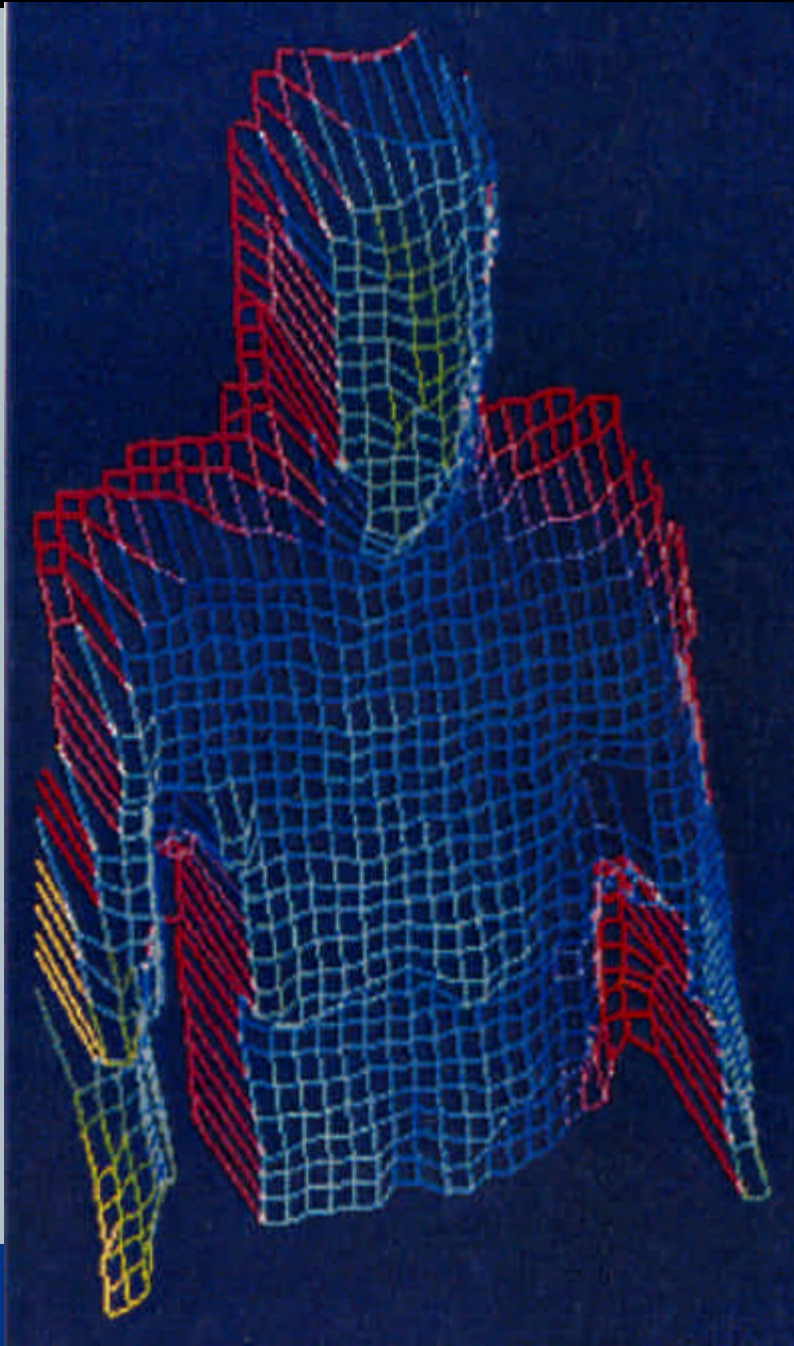
Intelligent restraint systems



Optional Satellite Sensor

Primary Sensor Location





Holistic Safety Approach

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