Developing the UK’s regulatory framework for automated vehicles

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Law Commission of England and Wales
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The Law Commissions

• Independent statutory bodies created in 1965
• Purpose: to keep the law up to date, simple, cost effective and fair
The Law Commissions’ three year project

- **Consultation Paper 1**: safety and legal accountability (8 Nov 2018)
- **Consultation Paper 2**: passenger services and public transport (Autumn 2019)
- **Consultation Paper 3**: Bringing proposals together (2020)
- **Final report** (2021)
Who responded?

Respondents by category:
- 18% academics
- 17% individuals
- 15% emergency services and police
- 15% local government, highways authorities and representative groups
- 15% transport research, consultancy and professional organisations
- 9% public sector
- 7% safety and road user groups
- 6% insurance
- 5% legal
- 4% disability groups
- 2% OEMs and developers
- 2% other
Safety assurance scheme

• Strong support for a national safety assurance scheme to complement international type approval
  • Prohibit unauthorised systems
  • Modifications and small series
• Dutch ‘driving licence’ for self-driving cars
• UK GOVERNMENT ACTION: CAV PASS announced 4/09/2019
Automated Driving System Entity

- Role: submits ADS for authorisation and vouches for its safety
- Presence in jurisdiction
- Subject to range of regulatory sanctions
- Most respondents (85%) agreed
Road incident investigation

• General consensus that focus needs to shift from allocating blame to learning for the future
• Need to review law on corporate offences where wrongs by developer result in death/serious injury
• Short term: need to provide specialist help to police
Two development paths

Path 1:
- Consumer vehicles sold across borders;
- Continue to have human in the driving seat

Path 2:
- Sells a journey rather than a vehicle.
- No driving seat
Path 1: User-In-Charge

• Who:
  • Human in or line of sight of vehicle
  • Qualified and fit to drive

• Role:
  • Non-dynamic control responsibilities, e.g. insurance, maintenance
  • Not responsible for dynamic control while ADS is engaged
  • Takes over from highly automated driving system
Path 1: User-in-charge

• Key premise: if the User-In-Charge is not responsive the vehicle can come to a safe stop.
• Most consultees (79%) agreed
• 52% against secondary activities in conditional automation, SAE Level 3
• Remote operator ≠ user-in-charge
Upcoming Consultation Paper 2: Automated Vehicles: Passenger Services & Public Transport

KEY THEMES

Focus on Path 2: passenger-only vehicles

Aims of regulation

Operator licensing: A single national system

Private ownership

Accessibility

Local regulatory tools for controlling congestion and cruising

Integration with public transport
Path 2: passenger services
Highly Automated Road Passenger Services (HARPS)

- A service which uses highly automated vehicles to supply journeys to passengers without a human driver or user-in-charge
- For at least part of the journey, a HARPS would be able to travel empty or with only passengers on board.
- Fleets providing mobility services
Operator as key concept for HARPS

- Operating a fleet of vehicles vs developing ADS
- Remote supervision
- Responsible for maintenance, insurance, duties after an accident
- Protocols for intervention in the event of ADS malfunction (e.g. removed a vehicle stopped in the middle of the road)
## Legal responsibility for driving tasks

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<tr>
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<th>Path 1: User-In-Charge vehicles</th>
<th>Path 2: HARPS fleet vehicles</th>
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<tr>
<td><strong>Dynamic Control</strong></td>
<td>ADSE</td>
<td>ADSE</td>
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<td><strong>Non-Dynamic Control</strong></td>
<td>USER-IN-CHARGE</td>
<td>HARPS OPERATOR</td>
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HARPS national operator licensing

• We provisionally propose a new single national system to licence HARPS operators
• New unified system not replicating distinctions between taxis, pre-booked only services and buses
Q&A

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