Some Automation Distinctions

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law of the newly possible
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Certainty

Ambiguity
Help
Hurt
Lunch

No lunch
Traffic safety for middle- and low-income countries

Traffic safety for high-income countries
Automation for middle- and low-income countries

Automation for high-income countries
Types of trips

Types of features

Types of vehicles
On reaching a crash site, an ADS-equipped vehicle stops in its lane until someone at a monitoring center sketches a travel path. Using its sensors, it then follows this path.

1) Did the ADS achieve a minimal risk condition?

2) Was there a remote driver?
Road Traffic and Road Signs and Signals Agreements and Conventions

7 Convention on Road Traffic, of 19 September 1949 (including Final Act and related documents)
   English/French/Spanish
   Status and Contracting Parties

8 Convention on Road Traffic, of 8 November 1968 (2006 consolidated version) *(Hard copy)*
   Arabic    Chinese    English    French    Russian    Spanish
   Status and Contracting Parties
   Amendments which entered into force on 28 March 2006
   English    French    Russian
   Amendment 1 only (entered into force on 3 September 1993)
   English    French    Russian
   Convention on Road Traffic, of 8 November 1968 (1993 consolidated version)
   English    French    Russian
   Chinese and Spanish versions of original unamended Convention
International law
harming innovation

Innovation harming
international law
AVs have human “drivers”

AVs have “drivers” of some kind

Article 8 does not apply to AVs

Conventions do not apply to AVs
Different paths to the same goal

Global Forum for Road Traffic Safety (WP.1) resolution on the deployment of highly and fully automated vehicles in road traffic

Résolution du Forum mondial de la sécurité routière (WP.1) sur le déploiement de véhicules hautement et entièrement automatisés dans la circulation routière

Резолюция о внедрении в практику высоко- и полностью автоматизированных транспортных средств в условиях дорожного движения Глобального форума по безопасности дорожного движения (WP.1)
Comfortable with legal status

Want more comfort with legal status
Want specific rules before deployment

Want specific rules informed by deployment
Amend rarely

Amend regularly
Obligations under 1949 Convention

Obligations under both Conventions

Obligations under 1968 Convention
If
• A, B, C agree that all phones must be green
• B, C, D agree that all phones must be red

Then
• Phones in A must be only green
• Phones in D must be only red
• Phones in B and C must be *both* only green *and* only red—impossible!
Convention on Road Traffic (1949)

Geneva Conventions
[international humanitarian law] (1949)

Agreement on Technical Regulations (1958)

Charter of the United Nations (1945)

North Atlantic Treaty (1949)

General Agreement on Tariffs and Trade (1947)
Change substantive legal obligations

Clarify substantive legal obligations
“Driver” as a legal term in the conventions

“Driver” as shorthand for a set of responsibilities
Individuals operate AVs

Computers operate AVs

Companies operate AVs
Prospective safety standards

Retrospective safety standards
Retrospective

At least as safe as a human in the maneuver

and

At least as safe as a comparable ADS

and

Safer than the ADS that just crashed
Prospective

Are the companies developing and deploying an automated vehicle worthy of our trust?
Focus on goals

Say what you mean

Don’t let the perfect be the enemy of the good