CAT Coalition
Policy, Legislative, and Regulatory Working Group Webinar

February 13, 2020

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Welcome and Agenda Review

2:05 **Research on AV Legislation**
Bill Covington, University of Washington School of Law

2:35 **Plain Language for ADS Policies and Legislation**
Jennifer Toth, MCDOT & Paul Ajegba, MDOT

2:50 **Quick Update from Focus Area WG – Strategic Initiatives WG**

2:55 **Partner Reports: USDOT, ITS America, ITE, Other**
USDOT – TBD
AASHTO
ITS America
ITE

3:15 **Status of the 5.9 GHz Spectrum**
Pat Zelinski, AASHTO

3:30 **Next Webinar / Close**

Agenda Item #1:
Research on AV Legislation

Bill Covington, University of Washington School of Law

Bill Covington's Slide Show is available at:

https://docs.google.com/presentation/d/1CTW-tMOTR8CgSmf0s3U1rnG_DUdi2ZcodqD6YqxtUP4/edit?usp=sharing

Agenda Item #2:
Plain Language for ADS Policies & Legislation

Jennifer Toth and Paul Ajegba

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CAT Terminology – Plain Language for Automated Driving Systems (ADS) Policies

The Challenge/Need:

- Legislators need clear concise nomenclature with common definitions when creating & reviewing policies & legislature

The Concept:

- Review what language & terms are used in existing ADS policies & legislature in member states
- Synthesize terms; identify conflicts, challenges, and commonalities
- Coordinate with a parallel USDOT effort underway
- This effort **Will NOT** create any guidelines or recommendations for nomenclature

Findings to Date

***States Are Mostly Consistent in the Use of Four Key Terms*:**

- Terms defined by SAE J3016 Taxonomy Document; re-enforced by AV 3.0
- Generally all terms are consistently defined in states' legislations
- Some states excluded 1 or 2 of the terms

The states differ in authoritative statements – i.e. how their laws describe the use of automated driving systems

Four Key Terms Explored:
- Automated Driving Systems
- Dynamic Driving Task
- Minimal Risk Conditions
- Operational Design Domain

Examples of Different Terms in Authoritative Statements

- Example A: A driverless-capable vehicle may operate on the public roads of this state without a conventional human driver physically present in the vehicle, as long as the vehicle meets the following condition
- Example B: Testing or operation of vehicles on public roads that do not have a person present in the vehicle shall be allowed only if such vehicles are fully autonomous
- Example C: An autonomous vehicle or a fully autonomous vehicle may be operated in this state under an autonomous vehicle pilot program approved by the State Highway Commission
- Example D: A person may use an Automated Driving System to drive a motor vehicle or to control a function of a motor vehicle if the system is capable of complying with every state and federal law that applies to the function that the system is operating.
- Example E: Notwithstanding any other law, a licensed human operator is not required to operate a fully autonomous vehicle …. "A fully autonomous vehicle may operate in this state regardless of whether a human operator is physically present in the vehicle.

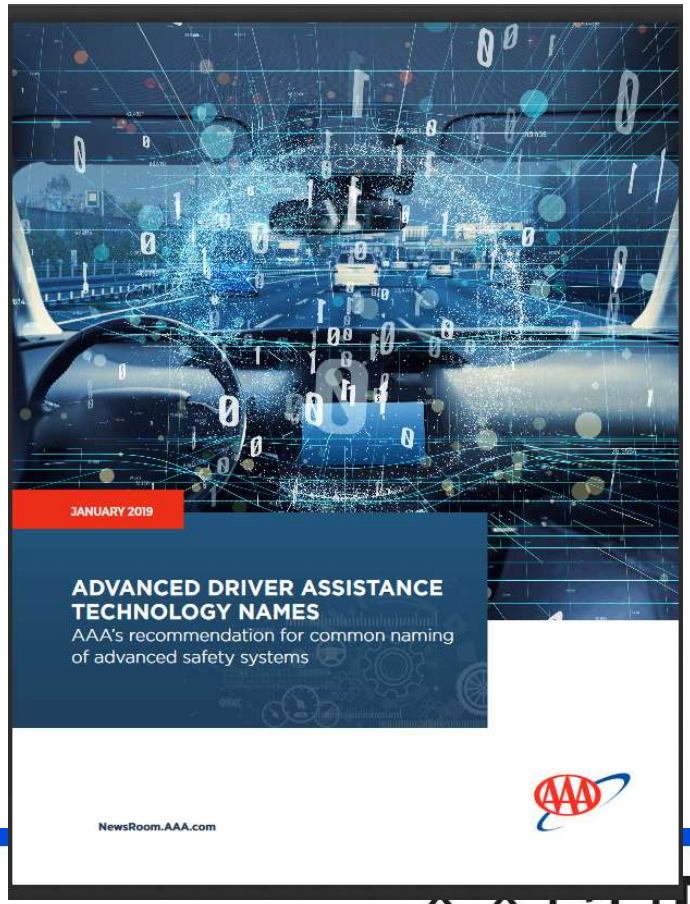
Examples of Different Terms in Authoritative Statements

- Example F: An autonomous vehicle may operate on a public roadway; provided, that the vehicle: <full list omitted>
- Example G: A person may operate a fully autonomous vehicle with the automated driving system engaged without a human driver being present in the vehicle, provided that such vehicle: <full list omitted>
- Example H: An autonomous vehicle may be operated on public roads for testing purposes by a driver who possesses the proper class of license for the type of vehicle being operated if all of the following requirements are met
- Example I: An autonomous vehicle with automated driving systems engaged does not require a human driver to operate on the public highway if the autonomous vehicle is capable of achieving a minimal risk condition in case a system failure occurs which renders the automated driving system unable to perform the entire dynamic driving task relevant to the vehicle's intended operational design domain.

Summary of Findings

Terms in Authority Statement	# of states reviewed – use this term for the Authority Statement
Autonomous Vehicle	3
Fully Autonomous Vehicle	2
Driverless capable vehicle	2
Fully autonomous ("…if such vehicles are fully autonomous")	1
Automated driving system	1
Autonomous vehicle with automated driving systems engaged	1
Fully autonomous vehicle with automated driving systems engaged	1

AAA Recommendations for ADAS Technology



https://www.aaa.com/AAA/common/AAR/files/ADAS-Technology-Names-Research-Report.pdf

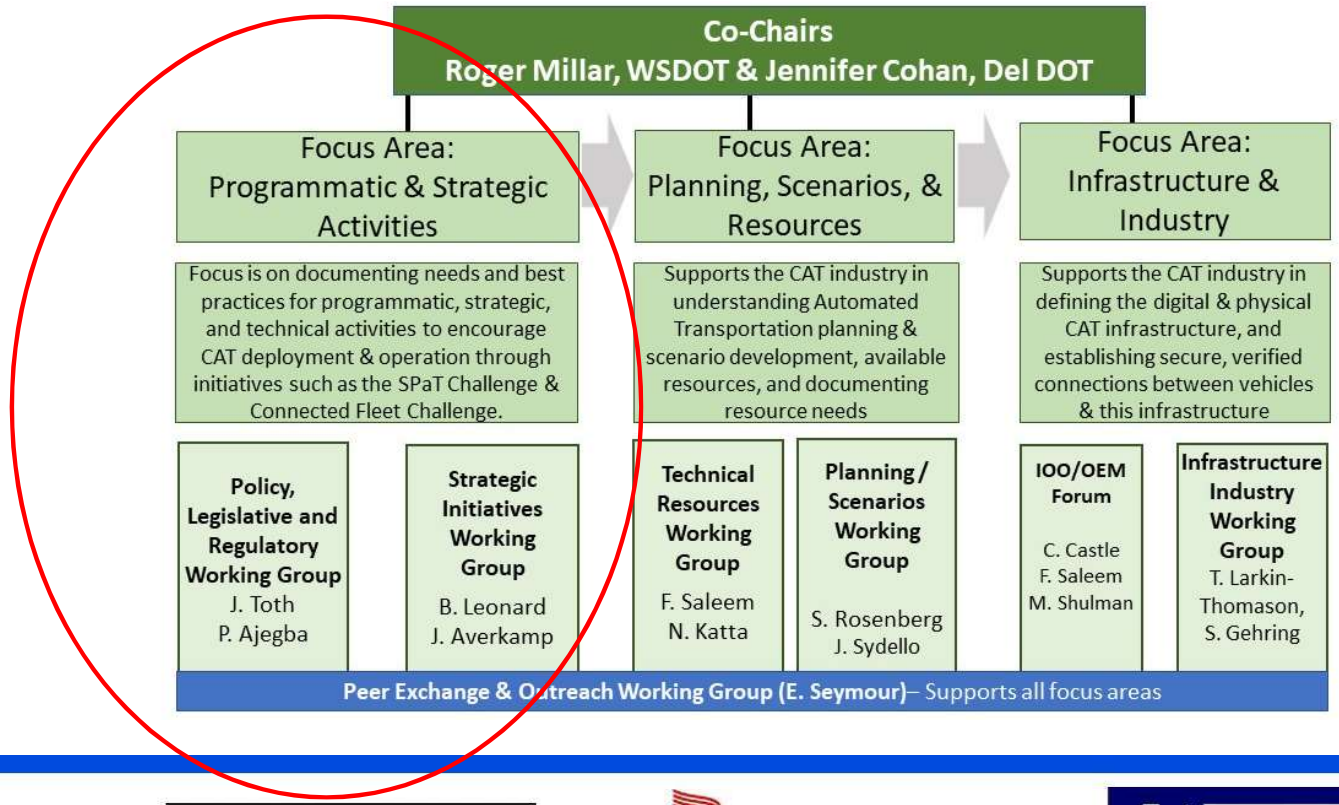
Discussion

- Is this topic appropriate for an NCHRP Problem Statement?
- Should this working group pursue this topic further?

Agenda Item #3:
Brief Update from the Focus Area Working Group: Strategic Initiatives WG

Blaine Leonard, Utah DOT & Chair of Strategic Initiatives WG

Programmatic & Strategic Activities Focus Area



Strategic Initiatives WG – Jan. 23rd Webinar

Three presentations:

- Example of a Connected Fleet Vehicle deployed to broadcast Basic Safety Message;
  - Maryland Transportation Authority

- Two Projects that Tested Latency of DSRC vs. 4G LTE:
  - New Hampshire DOT / City of Dover
  - Caltrans / PATH

Strategic Initiatives WG – Other Activities

Survey of SPaT Challenge sites to understand approaches to security credentialing (SCMS):

- Early input:
  - 7 States responded:
    - 6 are pursuing SCMS to secure broadcasts
      - 4 with Greenhill / ISS
      - 1 with BlackBerry
      - 1 researching both Greenhill/ISS and BlackBerry
    - 1 State is not pursuing security at this time (demonstration project)

Strategic Initiatives WG – Other Activities

Enabling Connected Intersections:

- Majority of SPaT/MAP broadcasts are received by fleet vehicles (e.g. transit, snowplows) or after-market On-board units
- At least one formal announcement from an OEM has stated that production vehicles will have on-board safety applications starting in 2022
- Outside of the communications uncertainties that exist, there are data related actions needed to “enable” this connectivity to production vehicles

Strategic Initiatives WG – Other Activities

Enabling Connected Intersections – activities include:

- Agreeing to Minimum Requirements (update to the SPaT Challenge ConOps & Requirements)
- Final Test Plan & Verification Process
- Deployment Tracking Approach
- O&M Approach
- Security Requirements

Goal is to ensure OEMs trust IOO data for production applications

Agenda Item #4:
Partner Reports

- USDOT
- AASHTO
- ITE
- ITS America

Agenda Item #5:
Update on the Status of the 5.9 GHz Spectrum

Pat Zelinski, AASHTO

All

Other Member Updates

(If time allows)

Upcoming CAT PLR WG Webinars

- April 2, 2020 (11:00 am ET)
  - Maas/MOD Presenters needed

- ***Potential future presentation:***
  - ***Uniform Law Commission "Uniform Automated Operation of Vehicles Act"***

Any Other Business / Adjourn