

Workshop 5 (W5): 26 October 2021

Session 1 (S1): 1400 UTC

Session 2 (S2): 2200 UTC

Wkshp	Time	ID	Src	Comment	Online Discussion	Disposition
W5S1	9:05:31	158	P2	[Slide 6] for anticollision issues filtering might not be appropriate, or might become quite complex		Agreed that filtering might become complex if it is not constrained into categories.
W5S1	9:06:30	159	P3	Seems like a good idea to have different user profiles - and different sets of info to different user profiles.		Agreed; the ConOps will indicate that rules could be grouped into sets of data based on user profiles
W5S1	9:07:57	160	P4	[Slide 7] Animals?	Agreed, warning may be needed	Agreed; warnings of animals on the road can be achieved by "advisory" rules
W5S1	9:08:53	161	P2	[Slide 8] micromobility users are humans. Humans have eyes. They will mainly use their eyes and ears to manage their movement		Agreed that this is the expected case for the near future, but driver support systems can benefit from this information. For example, segways might be prohibited from using a sidewalk; if a segway-based user attempts to drive on a sidewalk, the smartphone can alert the user of the violation
W5S1	9:10:47	162	P4	Motorized wheelchairs, golf carts or equivalent, rickshaws	P5->P4: I don't think the slide is intended to be comprehensive, but certainly anything on the road would have to be able to be considered.	Agreed, all vehicle types regulated by a jurisdiction need to be defined by the jurisdiction and conveyed via METR
W5S1	9:14:59	163	P6	Each vehicle should have a profile which includes the information required for traffic management, emissions zones, etc.		Agreed, the characteristics used by a jurisdiction to classify a vehicle might include usage characteristics (e.g., delivery or not), emission characteristics, and other

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W5S1	9:17:23	164	P2	[Slide 9] Yes, a Vehicle Needs to know the type of road with related regulations. Otherwise, all applicable regulations / rules must be provided explicitly.		Thank you for the confirmation
W5S1	9:18:54	165	P7	[Slide 10] Is it not enough to know the regulations for the point in space without need to classify the road?		It likely becomes a question of how to most efficiently convey a set of rules and METR should likely allow options to promote efficiency and consistency with the way that many rules are written. For example, it is likely easier to define the default weight limit for all roads of a particular category than it is to include this information for each road. However, METR still needs to be able to allow specific roads to be associated with different weight limits.
W5S1	9:20:54	166	P3	Some time in future I hope METR data could replace physical signs,		This makes sense, this implies that METR needs to convey the location for every rule (e.g., the location of every stop sign)
W5S1	9:25:14	167	P4	[Slide 11] People versatility is unlike anything that can be done with technology. From McCarthy in 1955 onward AI and deep learning has not developed.		Agreed that humans are difficult to manage and that machines are more predictable but less adaptable as well.

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W5S1	9:27:54	168	P7	[Slide 12] All of them		Agreed that the vehicle needs to be aware of its relevant characteristics in order to determine if specific rules might apply. We will attempt to provide an informative enumeration of characteristics in the ConOps so that they are not omitted from the design (but we expect that this list will continue to grow after the completion of the ConOps); if you have specific suggestions, please let us know.
W5S1	9:28:19	169	P4	contents in vehicles such as hazardous materials (may be in light vehicles when carrying hazardous materials)		Agreed, the list needs to include an indication for hazardous materials and the specific types of material. Likewise, there should be a way to inform the vehicle that hazardous materials are on-board, but that is a task outside of METR.
W5S1	9:28:48	170	P8	current purpose		Agreed, that the list of characteristics needs to include the current purpose of the vehicle (e.g., delivery, emergency response)
W5S1	9:30:18	171	P4	How to deal with vehicles that have choice by operators to enable and disable some features?		Each vehicle is responsible for complying to rules at all times. If a vehicle allows an operator to change states, it should be prepared for all possible states. How a vehicle achieves this is outside the scope of METR - we just need to allow the capability, which can be done by allowing user system to access multiple categories of rules.

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W5S1	9:30:58	172	P7	[Slide 13] The very aim of METR is to avoid that. Is it not?	P8: I am inclined to agree	Not sure if this is the "aim of METR", but we accept that the group believes that METR does not need to convey the presentation of each traffic control device; this can be left to the manufacturers to determine if there is a need for this information.
W5S1	9:34:13	173	P4	[Slide 14] Distinguish between new new signage and change to existing signage.		The METR ConOps will be written so that METR can distinguish between a planned change to a rule (e.g., changing the speed limit next week) and a plan for a new rule (e.g., implementation of a new parking restriction next week)
W5S1	9:37:02	174	P4	Distinguish between data exchanged among devices and information (useful to operator and control devices)		Agreed that the ConOps will need to use precise terminology and there will be ample time for reviewing the document to make refinements.

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W5S1	9:38:36	175	P4	Exchange of data among vehicles and exchange with roadside devices and centers for each level of automation in vehicles and multi-channel operations.		Agreed that the information that a vehicle might need to be aware of when a new sign has been installed might be different based on the capabilities of the vehicle and current situation. Some vehicles might be able to detect a newly installed sign based on data exchange among nearby vehicles (e.g., cooperative perception), if such other vehicles are present. In other cases, the information might be provided from roadside or center-based sources. Finally, some vehicles might be equipped with sensors to detect the sign. However, METR as a whole should likely be designed to allow support for the lowest common denominator meaning that it needs to be able to advertise when new signs are installed in real-time.
W5S2	17:19:31	176	P9	[Slide 8] SAE J3194 powered micromobility vehicles		Agreed that SAE J3194 provides a useful taxonomy of micromobility vehicles; we plan to continue working with ISO/TC 204 WG 1 in their efforts to provide a complete taxonomy of all surface transport vehicles.
W5S2	17:23:30	177	P9	[Slide 9] have a look at ISO 15638		TBD; we will consider this in future design efforts when we develop a data model.