

Workshop 1 (W1): 5 October 2021

Session 1 (S1): 1400 UTC

Session 2 (S2): 2200 UTC

Wkshp	Time	ID	Src	Comment	Online Discussion	Disposition
W2S1	9:11:23	65	P2	The question is perhaps more if a role as Translator needs to exist after a phase of translating all existing paperwork into electronic format. Would it not be natural that Regulator would move up and work in electronic format?	P4->P2: I believe in that case the regulator is consolidating the regulation and translation roles into one. That's supported.	Agreed in principle that in the (hopefully near) future that most regulators should fulfil the role of translator as well. However, METR is unable to require this so I think we have to allow for the separate existence of translators. In particular, it might be a significant period of time before small regulators (e.g., small stores with one accessible parking space) would serve as their own regulator (although eventually perhaps this is achieved through online web entry forms hosted by the parent jurisdiction)
W2S1	9:12:12	66	P3	I think there will always be a case for standardising the format to enter data into the collector and for small road agencies there is a long way to go before we get there.		Agreed.

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W2S1	9:14:11	67	P2	Exactly. Another role that is probably hidden inside other roles is checking for conflicts and overall consistency from different input streams?	<p>P4->P2: we do not currently define that as a separate role, however consistency checking, conflict management and the like are probably inherent requirements that will have to be mapped to a user need related to consistency</p> <p>P5: only to validate the rules they are using - i.e. correcting ambiguity - to improve the accuracy of the resulting database</p> <p>P4->P5: that is a response to the ambiguity and conflict management question?</p>	Agreed, we should probably indicate that the METR disseminator has a responsibility to perform consistency checks on the electronic rules being sent and to resolve conflicts with collectors/translators. In addition, all other METR components should perform consistency checks as needed and report any discrepancy. However, the exact scope and logic of those checks are outside the scope of METR
W2S1	9:14:35	68	P5	There needs to be a source (one) relevant to all regulations affecting my current location	P4->P5: yes, ideally	This is useful input and it seems to be the consensus that for any particular user, there should be a single centralized source of METR information at any point in time. In some regions, this single source might be a public source that provides the data for all users; while in other regions, there may be multiple disseminators (e.g., one per OEM). Locally pushed rules (e.g., perhaps better termed "C-ITS data") will likely be provided by a different source.
W2S1	9:15:31	69	P6	what means as market Research"?"		The purpose of the workshops is to discuss these issues with the marketplace so that the ConOps reflects stakeholder needs

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W2S1	9:21:09	70	P7	Would the model vary as environment evolves (changes in technology, in processes, et al) and whether there is a push-pull relationship developing?	P4->P7: we are trying to keep the roles distinct from the technologies used to implement.	Deployment models will likely vary as technologies change, but the fundamental user needs should change at a much slower pace, which is part of the gains of developing a ConOps separate from a requirements document. Nonetheless, needs will eventually need to evolve just as technology has created a new need of METR, so the standards will need to be maintained over time.
W2S1	9:26:03	71	P5	GIS based distribution services - so that all regulations affecting my immediate location are known to me! Shouldn't this be universal - so that the Onboard Systems are assured they have the relevant information - time relevant and spatial relevant?		Yes, certainly the METR users and disseminators will need to coordinate to ensure that the rules for the current location are always provided in a timely fashion.
W2S1	9:27:11	72	P5	[Slide] 22 is about the distribution service - not user to user	P1->P5: mobile disseminator?	There seems to be consensus that the entity providing a remote update should be viewed as a special type of disseminator, which might impose certain types of additional requirements on the remote rule provider.
W2S1	9:39:20	73	P7	Given EDR activated by an incident, the time is essential in investigation and determining sequence of events. Is millisecond or 10 microsecond time needed to support investigations?		The time resolutions recorded by an electronic data recorder is independent on the frequency at which METR is provided. Yes, the EDR will likely record the precise time at which METR information was received, but the our focus is on the time lag between the imposition of a rule and the notification of a user.
W2S1	9:39:55	74	P1	back on slide 17		

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W2S1	9:40:20	75	P5	There needs to be a clear distinction between rules" and "regulations" and device status (e.g. spat MAP)"		WG19 emphasized the importance of "METR" (or at least the ConOps) being able to explain how users and user systems always have trustworthy information to make decisions, including dynamic rules. Based on the discussions in this workshop, it appears that there is consensus to view most "rules" transmitted by a centralized disseminator as a separate category of information than the more dynamic "C-ITS data" that the rules might rely upon to convey current state information. For example, a METR "rule" might indicate that a particular junction is controlled by a traffic signal and that the current state of the signal is conveyed using the C-ITS data contained in SPaT messages. Likewise a "rule" might indicate that a variable speed limit system is in use and that the actual speed limit in effect is defined by external C-ITS data. In short, the "C-ITS data" term will likely replace what we previously termed "dynamic rules". Future efforts to define requirements for METR will then focus on the centralized "rules" while other efforts will be responsible for "C-ITS data".

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W2S1	9:50:23	76	P6	Tasks of an authority should never be handed over to private organisations.	P8->P6: tasks yes, responsibility no.	The METR standards series does not have the authority to prohibit private entities from fulfilling roles. If a jurisdictional entity provides trustworthy electronic rules, it is unlikely a private organization would ever attempt to compete. However, if a jurisdictional entity does not provide electronic rules, it is likely that private organizations will try to fill the void while undertaking the associated liability for a fee. Agreed that a jurisdictional entity is unable to transfer its legal power to issue rules of behaviour; but unless there are local laws against such practices, there is nothing against a private service advertising rules established by a jurisdictional entity.
W2S1	10:35:09	77	P7	For work zone, assume that the data is based on MUTCD regarding warning devices and signage, elsewhere there may be a similar document for each instance.		Agreed, the rules are defined by traditional means as often represented in the field using defined traffic control devices; METR simply represents these rules in electronic format.
W2S1	10:45:12	78	P5	needs to be a well defined ITS service - likely state or local unlikely federal --		The consensus appears to be that there needs to be an ITS service that allows discovery of disseminators, but the definition of that service is outside of METR (but a more generic part of ITS).
W2S1	10:45:50	79	P6	We need to distinguish push and pull mechanisms. Push must be a standardized Approach under full Control of an authority - no private Paid service		This seems to be consistent with the overall sentiment of the group that the "push" data is really C-ITS data and cannot be a paid or subscription-based service.

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W2S1	10:45:56	80	P6	Subscription is only reasonable to Information that is not of regulatory nature.		Based on the overall discussions to date, it would appear that this is a valid assumption to the extent that <u>user systems</u> are legally required to conform to rules. For example, if the vehicle system is required to limit the speed of the vehicle to the posted speed limit (and perhaps override driver commands), then it seems reasonable that the rules would be publicly available and provided to the vehicle in electronic form. However, when there are no such regulations, then the only users who need electronic regulations are likely those who are in high-end (e.g., ADS-equipped) vehicles, then public agencies might be hesitant to pay for the operation of a service that only the wealthy benefit from. The METR standards series should be flexible enough to allow for both approaches.
W2S1	10:46:29	81	P6	The regulatory part of METR should never be based on public-private-partnership.		It is unlikely that the METR standards series will be able to constrain deployments to one model or another. Each sovereign country or region is likely to adopt its own approach.
W2S1	10:57:13	82	P7	Will system requirements include system of systems and its component requirements?		We have only started visualizing what the next steps are. Our best guess at this point in time is that we will need to develop the requirements of the system of systems; we might then need to develop additional documents for each system and interface, but the exact order and scope of items will be based on stakeholder priorities at the time.

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W2S2	17:09:52	83	P13	is there a system assurance/certification role?		Every METR system component will need to be a part of the ITS trust network and will therefore need to be certified as trustworthy (e.g., basic certification as an ITS station). At this point, it is unclear that there is enough consensus to formally define additional certification needs within the METR ConOps, but it seems reasonable to mention that certain jurisdictions might require additional certifications to perform various roles.
W2S2	17:10:28	84	P14	is there any recognition of an enforcement authority role too?	P4->P14: at this level we see enforcement as a consumer of rules. Effectively, just another end entity.	From the METR perspective, we have identified the enforcement role as one of several "ITS users" in that they will need access to the data to perform their activities (i.e., verify that the electronic rules are consistent with posted rules before conducting an enforcement action). At this point, we have not identified any additional role for enforcement authorities.
W2S2	17:12:14	85	P13	slide 8 - is there a role for a 'service provider'?	P4->P13: there has to be some sort of de-conflict as well, all in service of a user need related to 'complete and correct set of regulations.' We don't elevate those to the level of roles, but expect requirements associated with the translator and/or collector.	The term "service provider" in this context is ambiguous (in fact ISO/DTS 14812 points out that there are many types of "service providers". Each role provides a service to the components connected to it. In the most general (layman) terms, most people would probably interpret the disseminator as the "service provider" since the disseminator is the public-facing component that most users interface with. As P4 points out, the disseminator will also have the responsibility to identify any conflicts that might exist among the rules and to work with regulators and others to remove these conflicts.

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W2S2	17:15:47	86	P14	Not sure I feel very comfortable defining a regulator as a creator of rules (regulations) BY TRADITIONAL MEANS.		Agreed, the wording that we use should not prohibit the concept that a regulator might originally create the rules in electronic form and thereby simultaneously fulfil the role of a translator.
W2S2	17:19:30	87	P14	would be good to have an all" example"		The "*" on the diagram follows the UML conventions to mean "many" rather than "all". We will consider changing the asterisk to a "n" to prevent this confusion.
W2S2	17:19:35	88	P13	13&14 - no concerns		Thank you (regarding relationships among translators and collectors)
W2S2	17:20:41	89	P13	15&16- no		Thank you (regarding relationships among collectors and disseminators)
W2S2	17:24:08	90	P14	Given the spectrum of potential set of rules and we assume disseminators use filtering we could find a user could have multiple qualifying characteristics at any location at any times (i.e. overlapping jurisdictions).	P4->P14: yes....	It appears that the concern you raise is that a vehicle might be classified differently by different regulators who have authority over a common area. For example, per national government regulations the vehicle might be a "moped" while under local regulations it might be a "scooter" (where the local regulations have a different definition of "moped"). As a result, the vehicle needs to request national "moped" rules and local "scooter" rules. From the ConOps perspective, we only need to record that such a vehicle is able to obtain the rules that it needs; there are multiple possible designs that can handle this and eventually we will have to determine the appropriate design, but that is a discussion for a future document.

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W2S2	17:31:53	91	P13	17 - I think it is OK as a start, We will have more understanding once we actually try to stand up a proof of concept in a jurisdiction		Agreed. (regarding relationships among disseminators and users)
W2S2	17:38:30	92	P14	sounds reasonable		Thank you (regarding Slide 22: ITS user (mobile disseminator) to vehicle link)
W2S2	17:41:06	93	P13	fine with me. it will be worked out in each jurisdiction		Thank you (regarding Slide 23: reporting discrepancies)
W2S2	17:43:05	94	P14	no, looks good		Thank you (regarding Slide 23: reporting discrepancies)
W2S2	17:52:19	95	P14	and generally specified in local time		Agreed.
W2S2	17:56:14	96	P13	Slide 27 - this is a current problem even with speed limit data, no solution at present I don't think we can solve it here		By "current problem even with speed limit data", we assume you mean the challenge of navigation systems displaying the correct speed limits when these (even static) speed limits can change over time. This is one of the main issues that METR is intended to solve- but it requires the digitization of speed limits, preferably by those creating the rules and in a manner where the electronic rule is available prior to the rule going into effect.
W2S2	18:15:00	97	P14	no, sounds good		Thank you (Slide 31)