**IEEE P2846 Working Group**

**Meeting Minutes**

**January 30, 2020**

**9:30 AM to 5:30PM PST**

**Intel Campus 101 Innovation Drive**

**San Jose, California**

**Jack Weast, Working Group Chair**

**Ignacio Alvarez (Intel) – Recording Secretary**

<https://sagroups.ieee.org/2846/>

1. Meeting was call to order at 9:30 AM.
	* Introduction and Declarations of Affiliation took place.
	* WG Chair has presented [goals of this meeting](https://ieee-sa.imeetcentral.com/p/aQAAAAAEBey8).
	* WG membership has been established.
		+ NVIDIA, ARM, Infineon, Baidu, NXP, National Taiwan University, Exponent, Intel and Qualcomm commit to participate in WG
		+ Bosch indicates intention to commit but needs to upgrade membership
		+ Waymo declares themselves undecided, will confirm before next meeting.
		+ Other entities need internal discussions and provide intention to Chair / IEEE WG Manager before next meeting.

|  |
| --- |
| * Jack Weast (JW), Chair of IEEE 2846 Working Group (WG), presented goals of this meeting
* JW names Ignacio Alvarez (Intel) temporary Secretary
* Participant attendance registered through [sign sheet](https://ieee-sa.imeetcentral.com/p/aQAAAAAEBetz)
* Participants introduced themselves and affiliation(s)
* Jonathan Goldberg (Official IEEE Coordinator) represented Soo Kim,P2846 andIEEE Vehicular Society program manager in this meeting
* <https://standards.ieee.org/faqs/affiliation.html> noted for reference
* No concerns were raised with regards to affiliation
 |

* + Goal of this meeting – review of WG PAR

|  |
| --- |
| * Review of IEEE 2846 PAR (Title, Purpose and Scope) introduced by Chair
* Agreement that we need a review of terminology and glossary
* Agreement to review WG understanding of how do we fit with other standards efforts and regulations. Added to future Agendas
* JG: There should be no recordings of the WG meetings. Notes taken during the meeting are only for the purpose of recording meeting minutes
 |

1. Jonathan Goldberg , IEEE Staff, presented, [IEEE Entity Membership Process Presentation](https://ieee-sa.imeetcentral.com/p/aQAAAAAEBeEo)
2. Jonathan Goldberg , IEEE Staff, presented, [IEEE Standards Development Process Presentation](https://ieee-sa.imeetcentral.com/p/aQAAAAAEBeEo)

1. Approval of Agenda

|  |
| --- |
| Motion #1:Move to approve the Agenda, [IEEE P2846 WG First Meeting Agenda Jan 30 2020 - Draft v3.](https://ieee-sa.imeetcentral.com/p2846/folder/WzIwLDEyNDU3MzE3XQ/WzIsNjc0MTQ0ODBd/)Motioned by: Ghani Kanawati, ARMSeconded by: Karl Greb, NVIDIAMotion passes without opposition. |

1. Review/Approval of WG Policies and Procedures (P&P)

|  |
| --- |
| * **Based on the general consensus of the WG membership, the approval of** [**WG P&P**](https://ieee-sa.imeetcentral.com/p/aQAAAAAEBKnA) **is postponed until next meeting.**
* All participants were encouraged to review the [**IEEE P2846 Entity Method Working Group Policies and Procedures - DRAFT**](https://ieee-sa.imeetcentral.com/p2846/folder/WzIwLDEyNDYyMzIzXQ/WzIsNjc0MTQ0NjRd/) . This is also posted on the [WG web-site](https://sagroups.ieee.org/2846/meeting-agenda-minutes/).
 |

1. Establishment/Election of Officers
	* Election/Appointment (as per P&Ps) of Officers (Vice-Chair, Secretary, Treasurer (if needed)) OR
	* Nomination from the floor as specified under Clause 3.0 of WG P&P

|  |
| --- |
| * Official Call for Nomination will occur after the approval of the P&P.
* Secretary: Ignacio Alvarez (Intel) is appointed to serve as Recording Secretary until WG Secretary is filled.
 |

1. [IEEE Patent Policy](https://ieee-sa.imeetcentral.com/p/aQAAAAAEBey4) was presented by Jonathan Goldberg

|  |
| --- |
| * A [Call for Patents](https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.pdf) was made.
* NVIDIA has patents pending on their proposed solution (SFF). They will provide LOA to IEEE
* Intel has patents and patents pending on their proposed solution (RSS). They commit to provide LOA to IEEE
* WG members were informed to send in questions on patents to IEEE Patent Committee (patcom@ieee.org)
 |

1. Copyright Policy

|  |
| --- |
| * The [Copyright Policy](https://ieee-sa.imeetcentral.com/p/aQAAAAAEBey3) was presented by Jonathan Goldberg.
	+ Contributions made to the WG is any material provided verbally or in a recorded or written form.
	+ Contributions previously published require that IEEE is given permissions to these materials. Letters of permission associated must be provided and there should be no copyright symbols in the documents.
	+ Questions can be sent in to std-copyright@ieee.org
 |

1. Technical Presentation(s), Contribution(s) or Discussion(s) (in alphabetical order)
	1. Maria Elli, Intel, presented [Responsibility Sensitive Safety](https://ieee-sa.imeetcentral.com/p/aQAAAAAEBepF)
	2. Karl Greb, NVIDIA, presented [Safety Force Field](https://ieee-sa.imeetcentral.com/p/aQAAAAAEBepF)
	3. Surya Styavolu, Sirab Technologies, presented [High Reliable Automated Vehicle Guidance System New Business](https://ieee-sa.imeetcentral.com/p/aQAAAAAEBepD)

|  |
| --- |
| * **Open technical questions on SFF and RSS will be addressed in next meeting.**
* **Proposal to consider achieving consensus for reasonable assumptions and parameters outside the context of any specific formal model as this is a common need of nearly all formal models.**
* **WG Chair to contact NHTSA about Instantaneous Safety Metric to be considered for future contribution to this WG.**
 |

1. Unfinished Business

|  |
| --- |
| * Terminology / Taxonomy / glossary for consistency with other standard bodies and documents. **Assigned to Ed Straub (SAE), Karl Greb (NVIDIA), Ed Grifford (NIST)**
* Refine PAR definition to better narrow the scope, goals and purpose and to clarify the context of the standard in perceived “safety” of an AV. Discuss difference between “driving safely” vs “safety considerations” in decision making.**Assigned to Jack Weast (Intel), Kevin Gai (Uber), Qi Hommes (Waymo), Bert Doedderker (AID), Phillip Koopman (ECR)**
* Review fit of this standard with other standard activities and/or assessment methodologies**Assigned to Yali Wang (Baidu), Karl Greb (NVIDIA), Ed Scraut (SAE)**
 |

1. Action Items

|  |
| --- |
| * **WG Chair to consolidate proposals for change of PAR**
* Other Action Items noted in agenda subsections (see **highlighted** bullets)
 |

1. Future Meetings

|  |
| --- |
| * **Next meeting (ONLINE) is set for February 27th, 8 am PST (90 min – 2 hours).**
 |

1. Adjourn

|  |
| --- |
| Motion #2:Move to adjourned the meeting.Motioned by: Karl Greb, NVIDIASeconded by: Ghani Kanawati, ARMMotion passed without opposition. Meeting adjourned at 5:30 PM PST |