

IEEE P2520 Working Group

Draft Meeting Minutes

15 June 2021

WG Chair: Susan Schiffman

WG Secretary: H. Troy Nagle

Meeting Link: <https://ncsu.zoom.us/j/945473904>

1. Call to Order

Chair called meeting to order at 10:05 AM EDT. She announced that the meeting is being recorded for the purpose of preparing minutes.

2. Roll Call and Disclosure of Affiliation

Affiliation FAQs: <http://standards.ieee.org/faqs/affiliation.html>

The Secretary reviewed the Zoom Participants list and determined that a quorum was present. Eight of the 11 voting members were present. The participants of this meeting are listed in **Attachment A**.

3. Approval of Agenda

The Chair displayed the proposed revised agenda for the meeting. Susana Palma moved to approve the agenda; James Covington seconded. Without objection to unanimous consent, the agenda as displayed was adopted.

4. Approval of Previous Minutes

The Chair asked for a motion to approve the Minutes of the 19 October 2020 meeting. Susana Palma made the motion; James Covington seconded. Without objection to unanimous consent, the motion was approved.

5. IEEE Patent & Copyright Policies

a. Call for Patents

<https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.pdf>

Per standard IEEE SA WG meeting practice, the Chair reviewed the required policy regarding potentially essential patents. No one raised concerns for consideration.

b. Copyright Policy <https://standards.ieee.org/ipr/copyright-materials.html>

Per standard IEEE-SA WG meeting practice, the Chair reviewed the required policy regarding copyrights. There were no questions or concerns.

6. Technical Discussion:

a. Standard Series Numbering Scheme

The Secretary displayed our August 2020 proposed P2520 Series Numbering System. Six of the PARS have been approved. Vanessa Lalitte explained that we can't officially reserve these numbers, but she will reach out to the IEEE-SA NesCom

Administration to alert them regarding our future plans and determine if there are any restrictions that we should consider.

It was suggested that we add P2520.2.8 Hospital Odors to our working list.

The Chair suggested that we may want to include irritation sensations and health complaints into our odor evaluations. Individuals who complain about an odor commonly include eye, nose and throat irritations and headaches as major factors in their odor perception. Mass accumulation of odorants in the eyes and airway mucosa correlated highly with irritation complaints.

Another consideration may be vapors. Vapors designate compounds that are not gases in their normal state. For example, kitchen odors are generated by gases and vapors. Should some of our standards cover eNose vapor challenges? The Chair noted that regulators always address the FIDO characteristics: frequency, intensity, duration, and offensiveness. Are we going to include these in each of our sub-standards? We can include FIDO and irritation information and approaches in our planned P2520 Recommended Practices document.

b. IEEE Conformity Assessment Program (ICAP):

Ravi Subramaniam gave an update on ICAP. That program depends on industry sponsors and can be added to our formal activities later in the process. We should determine the market demand for this program because industry participation is really needed. Laura Cappelli has some experience in conformity and has discussed with Ravi the possibility of including ICAP in our P2520 plans. For the next steps, Ravi suggested that we form a separate committee under ICAP to explore industry interest. If the interest is there, further discussion can be undertaken about the program's sustainability and where testing labs might be located. Since patent policies do not apply, a separate ICAP committee is needed. Companies make decisions about conformity testing of their products. So, this new ICAP committee would be entity based. We will need to attract additional industry members to our WGs and then convince them to spin out the needed new ICAP committee.

University research labs can be approved to perform the ICAP testing. The IEEE then certifies the results. As we develop our P2520 series standards, WG members will need to run some of the tests in available university and company laboratories to verify that the tests we require are reasonable and achievable. After we have near final working drafts for our tests, new industry members may want to join with us (appropriate P2520 WGs and/or our ICAP Committee) to finalize our standards and establish the accompanying ICAP approved testing facilities. The market will ultimately depend on the desires of purchasers of commercially available eNose systems. So, our WGs will need to invite participation from the EPA, FDA and state-government regulatory agencies.

c. Updates on new Working Groups & d. Distribution of materials within the Guide and subsequent standards

P2520.1 (Baseline Performance, James Covington): James is eager to define the boundaries between P2520.1 and the subsequent P2520.x WGs. The P2520.1 WG is focusing on the specific tests over three levels. Once the level-tests are clarified, then the WG will tackle the level-passage criteria. Generally, P2520.1 is being simplified in two ways. First, some of the introductory materials will be moved to the P2520 Recommended Practices. Second, the total number of test exposures is being reduced. New versions will be distributed soon. A generic table of test chemicals (sets of three: A, B, C) will be provided. Recommendations for table ABC-row entries for P2520.x WGs will be encouraged. The P2520.1 will include only limited temperature and humidity testing. P2520.x WGs could expand on this aspect. P2520.1 will not address response times, recovery times, or high exposure responses. Some of these may be appropriate for P2520.x standards. P2520.1 is a laboratory-based set of tests. The P2520.x standards can require appropriate field-based test environments. P2520.1 will not require multiple tests over multiple days to show repeatability and reliability. Also, P2520.1 will not test mixtures of chemicals. A wide range and combinations of temperature, humidity, repeatability, and gas-mixture tests can be undertaken in the P2520.x testing schemes.

P2520.2.1 and P2520.3.1 (General Indoor and General Outdoor, Ehsan Danesh): In addition to specifying specific P2520.1 ABC test-chemical rows, these standards can expand the temperature and humidity tests as appropriate for their specific application areas.

P2520.4.1 (Chemical Manufacture, Susana Palma): Susana wants to develop a clear transition from P2520.1 into P2520.4.1. Keeping P2520.1 relatively simple, and then building on that for P2520.4.1 would be desirable. FIDO and irritation will be considered in her WG.

7. New Business/Activities for the Next Meeting

a. Should we establish a writing Subgroup?

Troy Nagle made a motion to approve the establishment of a P2520 Subgroup, defined as follows:

Title: P2520 Drafting Subgroup.

Scope: Coordinate with the other P2520.x WGs to develop a guide (or recommended practices) for using the P2520 Standard Series.

Membership: Members from other P2520.x WGs to participate. The P2520 WG Chair can solicit nominations for membership and appoint the Subgroup Chair.

Action: The new Subgroup could report progress to this WG at future meetings.

Krishna Persaud seconded. During discussion of the motion, Troy reviewed the IEEE-SA definitions of Recommended Practices and Subgroups. Without objection to unanimous consent, the motion was adopted.

b. *Should we appoint a Technical Editor?*

Vanessa Lalitte explained that Technical Editors are usually employed for entity-based WGs. Individual-based WGs like ours use volunteer editors. IEEE-SA provides a standards template, a style guide, and access to an IEEE-SA staff technical editor if we need help in the final stages of writing our standards. The IEEE-SA Technical Editors will carefully review and approve our standard submissions before they are formally published.

8. Future Meetings

Future Meetings of P2520 could take place on the first Monday of the month, as needed, to avoid conflicts with the other P2520 series WGs. The Chair announced the next meeting of the WG will take place in the Fall.

9. Adjourn

The Agenda being completed, James Covington moved that we adjourn; Krishna Persaud seconded. Without objection to unanimous consent, the Chair adjourned the meeting at 11:01 AM.

Attachment A: Participants (10)

NAME	AFFILIATION
Susan Schiffman	NC State University
Ehsan Danesh	Alphasense Ltd
James Covington	University of Warwick
Krishna Persaud	University of Manchester
Hua-Yao Li	Huazhong Univ. of Sci & Tech
Omer Oralkan	NC State University
Susana Palma	NOVA University of Lisbon
Troy Nagle	NC State University
Vanessa Lalitte	IEEE-SA Staff
Ravi Subramaniam	IEEE-SA Staff