

IEEE SA STANDARDS BOARD NEW STANDARDS COMMITTEE (NesCom)

MEETING MINUTES

18 June 2025

Vienna Austria and Webex

9:00 a.m. – 12:00 p.m. CEST (UTC+2)

Attendees

Members Present:

Ted Burse, Chair
Xiaofeng (Alfred) Chen, Vice Chair
Guido Hiertz, Vice Chair
Edward Au
Kit August
Yuan Chi
Darren Galpin
Howard Li
Johnny Lin
Hiroshi Mano
Daleep Mohla
N. Kishor Narang
Ramesh S.
Dan Sabin
Luyang Zhang
Daidi Zhong

Members Absent:

Periklis Chatzimisios
Amit Kumar

IEEE Staff:

Julie Alessi
Christy Bahn
Teresa Belmont, Administrator
Larry Bolsch
Hermann Brand
Matt Ceglia
Ravindra Desai
Chinmae Deshmukkh
Karen Evangelista
Jonathan Goldberg
Dalisa Gonzales
Jodi Haasz
Yvette Ho Sang
Patrycja Jarosz
Soo Kim
Michael Kipness
Vanessa Lalitte

Jiajia Liu
Sandra Maru
Erin Morales
Dave Ringle
Pat Roder
Jennifer Santulli
Malia Zaman
Meng Zhao

Guests:

Xiaoyu Ding
Doug Edwards
James Gilb
Latonia Gordon
Tyler Jaynes
Joseph Levy
Rengang Li
Mianchen Liu
Haiying (John) Lu
Kevin Lu
Ralf Ma
Yuki Nagai
Paul Nikolich
Annette Reilly
Robby Robson
Jon Rosdahl
Wei Tang
Claire Topp, Outside legal counsel
Mehmet Ulema
Chenhui Wang
Lei Wang
Zihang Yin
Yuhong Zhu

1. CALL TO ORDER

Chair Ted Burse called the meeting to order at 9:02 a.m. CEST (UTC +2). There was a round of introductions.

It was noted that the meeting was quorate.

2. REVIEW OF AGENDA

Chair Burse reviewed the agenda.

There was a motion to approve the agenda, including the consent agenda. In the absence of objection, the motion was approved.

2.1 Consent Agenda

Transfer of IEEE 1858 from the IEEE SA Board of Governors/Entity Collaborative Activities Governance Board (CAG) to IEEE Consumer Technology Society/Emerging Technology Standards Committee (CTSoc/ETSC)

3. APPROVAL OF MINUTES FROM THE 07 MAY 2025 MEETING

There was a motion to approve the [07 May 2025 meeting minutes](#). In the absence of objection, the motion was approved.

4. PARS FOR DISCUSSION

Unless indicated otherwise, the motions were approved unanimously.

4.1 Withdrawal Requests

There was a bucket motion to recommend the withdrawal of P3120 and P62271-37-082 based on the fact that preliminary votes have no objections to recommending withdrawal and there are no unresolved NesCom member comments. In the absence of objection or abstention, the motion was approved.

IEEE Computer Society/Microprocessor Standards Committee

P3120

Standard for Quantum Computing Architecture

Recommendation: Approve PAR withdrawal.

IEEE Power and Energy Society/Switchgear

P62271-37-082

High-voltage Switchgear and Controlgear - Part 37-082: Standard Practice for the Measurement of Sound Pressure Levels on Alternating Current Circuit-breakers

Recommendation: Approve PAR withdrawal.

4.2 Modified PARS

There was a bucket motion to approve P2807.6, P2247.2, P3005.7, PN42.37, P62671, P3413, P62704-1, and P62704-4 based on the fact that preliminary votes have no objections to recommending approval and there are no unresolved NesCom member comments. In the absence of objection or abstention, the motion was approved.

IEEE Computer Society/Knowledge Engineering Standards Committee

P2807.6

Guide for Architectural Framework and Application of Educational Knowledge Graphs

Recommendation: Approve modified PAR.

IEEE Computer Society/Learning Technology

P2247.2

Interoperability Standards for Adaptive Instructional Systems (AISs)

Recommendation: Approve modified PAR.

IEEE Industry Applications Society/Industrial & Commercial Power Systems Standards Development Committee

P3005.7

Recommended Practice for Application of Electrical Metering for Energy Management of Industrial and Commercial Power Systems

Recommendation: Approve modified PAR.

IEEE Instrumentation and Measurement Society/TC45 - Radiation and Nuclear Instrumentation and Systems

PN42.37

Standard for Preventive Radiological/Nuclear Detection Mission Training

Recommendation: Approve modified PAR.

IEEE Power and Energy Society/Nuclear Power Engineering Committee

P62671

Nuclear Power Plants - Instrumentation and Control Important to Safety - Selection and Use of Industrial Digital Devices of Limited Functionality

Recommendation: Approve modified PAR.

IEEE Power and Energy Society/Transmission and Distribution

P3413

Guide for Acceptance of Double Horizontal Jibs Gin Pole on Ground for Transmission Tower Erection

Recommendation: Approve modified PAR. (Recuse: D. Sabin)

IEEE SA Board of Governors/International Committee on Electromagnetic Safety

P62704-1

IEC/IEEE International Standard for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body from Wireless Communications Devices, 100 kHz to 10 GHz Part 1—General Requirements for Using the Finite Difference Time Domain (FDTD) Method for SAR Calculations

Recommendation: Approve modified PAR.

P62704-4

IEC/IEEE International Standard for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body from Wireless Communication Devices, 100 kHz to 10 GHz Part 4—General Requirements for Using the Finite-Element Method (FEM) for SAR Calculations

Recommendation: Approve modified PAR.

4.3 Extension PARs

There was a bucket motion to approve P2807.6, P2247.2, P3109, P4006, P3003.4, P3004.9, P2996, P61007-389, P1413.1, and P2413.2 based on the fact that preliminary votes have no objections to recommending approval and there are no unresolved NesCom member comments. In the absence of objection or abstention, the motion was approved.

IEEE Computer Society/Knowledge Engineering Standards Committee

P2807.6

Guide for K-12 Educational Knowledge Graphs

Recommendation: Approve request for an extension until 31 December 2027.

IEEE Computer Society/Learning Technology

P2247.2

Interoperability Standards for Adaptive Instructional Systems (AISs)

Recommendation: Approve request for an extension until 31 December 2027.

IEEE Computer Society/Microprocessor Standards Committee

P3109

Standard for Arithmetic Formats for Machine Learning

Recommendation: Approve request for an extension until 31 December 2027.

IEEE Geoscience and Remote Sensing Society/Standards Committee

P4006

Standard for Remote Sensing Frequency Band Radio Frequency Interference (RFI) Impact Assessment

Recommendation: Approve request for an extension until 31 December 2027.

IEEE Industry Applications Society/Industrial & Commercial Power Systems Standards Development Committee

P3003.4

Recommended Practice for Connections to Earth for Alternating Current (AC) Industrial and Commercial Power Systems Facilities

Recommendation: Approve request for an extension until 31 December 2026. (Recuse: D. Mohla)

P3004.9

Recommended Practice for the Protection of Transformers Used in Industrial and Commercial Power Systems

Recommendation: Approve request for an extension until 31 December 2027. (Recuse: D. Mohla)

IEEE Power Electronics Society/Standards Committee

P2996

Recommended Practice for Near Magnetic Field and Electric Field Characterization of Inductors

Recommendation: Approve request for an extension until 31 December 2027.

P61007-389

Standard for Transformers and Inductors for use in Electronic and Telecommunication Equipment - Measuring Methods and Test Procedures

Recommendation: Approve request for an extension until 31 December 2027.

IEEE Reliability Society/IEEE Reliability Society Standards Committee

P1413.1

Guide for Selecting and Using Reliability Predictions Based on IEEE 1413

Recommendation: Approve request for an extension until 31 December 2027.

IEEE SA Board of Governors/Entity Collaborative Activities Governance Board

P2413.2

Standard for a Reference Architecture for Power Distribution Internet of Things (PDIoT)

Recommendation: Approve request for an extension until 31 December 2026. (Recuse: D. Sabin)

4.4 New PARs

There was a bucket motion to approve P3598, P1936.19, P1936.20, P3706, P3410.1, P3551, P3711, P3234.01, P3240.08, P3240.10, P3273.01, P3274.01, P1484.20.3a, P3713, P3836, P3837, P3838, P3716, P3705, P3710, P1588k, P3719, P3599, P97, P837-2024/Cor 1, P3476.1, P3476.7, P2413.2.1, P3717, and P2520.2.2 based on the fact that preliminary votes have no objections to recommending approval and there are no unresolved NesCom member comments. The motion was approved.

IEEE Circuits and Systems Society/Flexible and Wearable Circuits and Systems Standards Committee

P3598

Standard for Interface Circuits for Wearable and Implantable Electrophysiological Signals (ExG)

Recommendation: Approve new PAR until December 2029.

IEEE Circuits and Systems Society/Hardware Security Standards Committee

P3718

Standard for Hardware Security: Attack Landscape and Protection Requirements

Recommendation: Approve new PAR until December 2029.

There was a motion to approve the recommendation of P3718. In the absence of any objection or abstention, the motion was approved.

IEEE Communications Society/Unmanned Aerial Vehicles Communications Standards Committee

P1936.19

Recommended Practice for Image Encoding and Decoding in Unmanned Aerial Vehicle Inspection of Overhead Transmission Lines

Recommendation: Approve new PAR until December 2029.

P1936.20

Standard for Identification of Electrical Fault Risk in Power Lines using Unmanned Aircraft System (UAS) Light Detection and Ranging (LiDAR)

Recommendation: Approve new PAR until December 2029.

P1958.5

Standard for Technical Requirements and Testing Methods for Hydrogen Cylinder Valves of Unmanned Aircraft Systems in Low-Temperature (-50C to -10C) Environments **Recommendation:** Approve new PAR until December 2029.

There was a motion to approve the recommendation of P1958.5. In the absence of any objection or abstention, the motion was approved.

IEEE Computational Intelligence Society/Standards Committee

P3702

Guide for Evaluation Metrics and Methods for Large Language Models of Electric Power Sector

Recommendation: Approve new PAR until December 2029. (Abstain: G. Hiertz)

There was a motion to approve the recommendation of P3702. The motion was approved with one abstention. (Abstain: G. Hiertz)

P3706

Guide for Brain-Inspired Computing and Intelligent Systems Applications in the Electric Power Grid

Recommendation: Approve new PAR until December 2029.

IEEE Computer Society/Artificial Intelligence Standards Committee

P3410.1

Standard for Constructing Large Scale Financial Risk Management Models

Recommendation: Approve new PAR until December 2029.

P3551

Standard for Framework for Electric Power On-Device Large Language Model Evaluation

Recommendation: Approve new PAR until December 2029.

P3591

Standard for Fair Decision Making Through Causal Analysis

Recommendation: Approve new PAR until December 2029.

There was a motion to approve the recommendation of P3591. In the absence of any objection or abstention, the motion was approved.

P3711

Standard for Performance Benchmarking for Artificial Intelligence (AI) in Video Database Management Systems (DMS)

Recommendation: Approve new PAR until December 2029.

IEEE Computer Society/Blockchain and Distributed Ledgers

P3234.01

Standard for Blockchain-Based Trusted Evolutionary Scheduling Model for Emergency Supplies

Recommendation: Approve new PAR until December 2029. (Recuse: X. Chen)

P3240.08

Standard for Technical Requirements of Blockchain-Based Carbon Footprint Management in Coal-Fired Power Generation

Recommendation: Approve new PAR until December 2029. (Recuse: X. Chen)

P3240.09

Standard for Technical Specification for Collaborative Control of Microgrid Based on Blockchain

Recommendation: Approve new PAR until December 2029. (Recuse D. Sabin)

There was a motion to approve the recommendation of P3240.09. The motion was approved with one recusal. (Recuse: D. Sabin)

P3240.10

Standard for Technical Requirements for Blockchain-Based Lifecycle Traceability Systems of Green Electricity

Recommendation: Approve new PAR until December 2029. (Recuse: X. Chen)

P3273.01

Standard for Technical Requirements for Blockchain-Based Structured Financial Product Clearing and Settlement System

Recommendation: Approve new PAR until December 2029. (Recuse: X. Chen)

P3274.01

Standard for Blockchain Based Technical Specification for Real-World Assets Registry System

Recommendation: Approve new PAR until December 2029. (Recuse: X. Chen)

IEEE Computer Society/Learning Technology

P1484.20.3a

IEEE Standard for Learning Technology--Data Model for Shareable Competency Definitions Amendment: Open Source

Recommendation: Approve new PAR until December 2029.

IEEE Computer Society/Standards Activities Board Standards Committee

P3713

Standard for Technical Specifications for Server Cold Plates

Recommendation: Approve new PAR until December 2029. (Recuse: E. Au)

IEEE Consumer Technology Society/Digital Finance and Economy Standards Committee

P3836

Standard for Requirements for the Framework of Data Management and Services in Energy Digitalization Systems

Recommendation: Approve new PAR until December 2029.

P3837

Standard for Reference Framework for Economical and Comprehensive Training of Embodied Intelligence

Recommendation: Approve new PAR until December 2029.

P3838

Standard for Unmanned Aerial Vehicles (UAV) Identification and Record Management System in Low-Altitude Economy

Recommendation: Approve new PAR until December 2029.

IEEE Engineering in Medicine and Biology Society/Standards Committee

P3716

Standard for the Quality Assessment of Human and Object Tracking Technologies Used in Field- or Court-Based Sports

Recommendation: Approve new PAR until December 2029.

IEEE Industry Applications Society/Industrial & Commercial Power Systems Standards Development Committee

P3705

Recommended Practice for the Selection of Power Converters for a Distribution Grid in Photovoltaic-Energy Storage-DC-Flexibility Integrated Buildings

Recommendation: Approve new PAR until December 2029.

P3710

Guide for Design of Modular Data Centers

Recommendation: Approve new PAR until December 2029.

IEEE Instrumentation and Measurement Society/TC9 - Sensor Technology

P1588k

IEEE Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems—Amendment: Security Enhancements

Recommendation: Approve new PAR until December 2029.

IEEE Intelligent Transportation Systems Society/Standards Committee

P3719

Standard for Mobile Drone Docking Stations

Recommendation: Approve new PAR until December 2029.

IEEE Magnetics Society/Magnetics Society Standards Committee

P3599

Standard for the Methods and Procedures for Characterizing Planar-Hall Magnetic Field Sensors

Recommendation: Approve new PAR until December 2029.

IEEE Power and Energy Society/Electric Machinery

P97

Guide for Advanced Diagnostic Techniques for Insulation Testing of Alternating Current (AC) Electric Machinery Using Direct Current (DC) Voltage

Recommendation: Approve new PAR until December 2029.

IEEE Power and Energy Society/Energy Storage & Stationary Battery Committee

P4333

Standard for General Requirement of Anode-free Lithium Metal Battery and Battery Pack

Recommendation: Approve new PAR until December 2029.

There was a motion to approve the recommendation of P4333. In the absence of any objection or abstention, the motion was approved.

IEEE Power and Energy Society/Substations Committee

P837-2024/Cor 1

IEEE Standard for Qualifying Permanent Connections Used in Substation Grounding — Corrigendum 1 Figure D.1 Modification

Recommendation: Approve new PAR until December 2029.

IEEE Power and Energy Society/Transformers

P3476.5

Standard for Supply Chain and Asset Traceability for Energy—Energy Transformation Devices

Recommendation: Approve new PAR until December 2029. (Recuse D. Sabin)

There was a motion to approve the recommendation of P3476.5. The motion was approved with one recusal. (Recuse: D. Sabin)

IEEE Power and Energy Society/Transmission and Distribution

P3476.1

Standard for Unique IDs and Smart Tags for Supply Chain and Asset Traceability for the Electric Grid—Structures and Support

Recommendation: Approve new PAR until December 2029. (Recuse D. Sabin)

P3476.7

Standard for Unique IDs and Smart Tags for Supply Chain and Asset Traceability for the Electric Grid—Surge Protection Devices

Recommendation: Approve new PAR until December 2029. (Recuse D. Sabin)

IEEE SA Board of Governors/Entity Collaborative Activities Governance Board

P2413.2.1

Standard for Testing Products, Systems, and Implementations Based on IEEE 2413.2

Recommendation: Approve new PAR until December 2029. (Recuse D. Sabin)

P3717

Guide for Wide-Bandwidth Measuring System for High Voltage Transmission Systems Rated 100 kV and Above

Recommendation: Approve new PAR until December 2029. (Recuse D. Sabin)

IEEE Sensors Council/Standards Committee

P2520.2.2

Standard for Landfill Odor Monitoring Devices and Systems

Recommendation: Approve new PAR until December 2029.

4.5 PARs for the Revision of Standards

There was a bucket motion to approve P2621.1, P2621.2, P650, P1267, PC57.120, and P1570 based on the fact that preliminary votes have no objections to recommending approval and there are no unresolved NesCom member comments. In the absence of objection or abstention, the motion was approved.

IEEE Engineering in Medicine and Biology Society/Standards Committee

P2621.1

Standard for Connected Medical Device Security Assurance Evaluation—Connected Electronic Product Security Evaluation Programs

Recommendation: Approve PAR for the revision of a standard until December 2029.

P2621.2

Standard for Connected Medical Device Security—Information Security Requirements for Connected Medical Devices

Recommendation: Approve PAR for the revision of a standard until December 2029.

IEEE Power and Energy Society/Nuclear Power Engineering Committee

P650

Standard for Qualification of Class 1E Static Battery Chargers, Inverters, and Uninterruptible Power Supply Systems for Nuclear Facilities

Recommendation: Approve PAR for the revision of a standard until December 2029.

IEEE Power and Energy Society/Substations Committee

P1267

Guide for Development of Specifications for Turnkey Substation Projects

Recommendation: Approve PAR for the revision of a standard until December 2029.

IEEE Power and Energy Society/Transformers

PC57.120

Guide for Loss Evaluation of Distribution and Power Transformers and Reactors

Recommendation: Approve PAR for the revision of a standard until December 2029.

IEEE Vehicular Technology Society/Communications Based Train Control and Signals

P1570

Standards for the Interface Between Rail and Highway Subsystems at Highway-Rail Intersections

Recommendation: Approve PAR for the revision of a standard until December 2029.

5. Old Business

There was no old business.

6. New Business

There was no new business.

7. Next Meeting

The next meeting will be a teleconference meeting on 9 September 2025 during the SASB September Meeting Series.

8. Adjournment

The meeting was adjourned at 10:18 a.m. CEST (UTC+2).