

IEEE SA Standards Board New Standards Committee (NesCom) Meeting Minutes

30 January 2023

Time: 9:30 a.m. ET (UTC-5)

Teleconference

Members Present:

Xiaofeng (Alfred) Chen

Doug Edwards

Ramy A. Fathy, Vice Chair

Guido Hiertz

Wei Hong

Yousef Kimiagar

Howard Li

Johnny Lin

Gui Liu

Daleep Mohla

Annette Reilly

Dorothy Stanley, Chair

Lei Wang

Karl Weber

Sha Wei, Vice Chair

Don Wright

Daidi Zhong

Members Absent:

Mehmet Ulema

Guests:

Katherine August

Sara Biyabani

Latonia Gordon

Xiaohui Liu

Eleni Mangina

Paul Nikolich

Barry Tilton

Claire Topp [legal counsel]

Yu Yuan

IEEE Staff:

Christy Bahn

Adrian Bastos

Kim Breitfelder

Matthew Ceglia

Ravindra Desai



Karen Evangelista

Jodi Haasz

Yvette Ho Sang

Ron Hotchkiss

Patrycja Jarosz

Konstantinos Karachalios

Soo Kim

Michael Kipness

Vanessa Lalitte

Jiajia Liu

Kelly Lorne

Karen McCabe

Suzanne Merten

Karen Mulberry

Christian Orlando

Dave Ringle

Pat Roder

Jennifer Santulli

Rosalinda Saravia

Tom Thompson

Lisa Weisser, Administrator

Malia Zaman

Meng Zhao

[Unless otherwise noted, all votes are unanimous]

1 CALL TO ORDER AND INTRODUCTIONS

Chair Stanley welcomed everyone and called the meeting to order at 9:32 a.m. ET (UTC-5). There was a round of introductions by all in attendance.

2 REVIEW AND APPROVAL OF THE AGENDA

The agenda was reviewed, and Chair Stanley asked if there were any changes to be made to the agenda. There were no changes.

A motion was made to approve the 30 January 2023 NesCom meeting agenda, including the consent agenda. In the absence of objection, the motion was approved.

2.1 Consent Agenda

2.1.1 Withdrawal Requests

IEEE Consumer Technology Society/Blockchain Standards Committee

P2146.2

Standard for External Data Retrieval of Blockchain for Risk Mutual Assistance Model

Recommendation: Approve PAR withdrawal

2.1.2 Standards Committee Transfer Request for Two PARS and Two Standards From VT/RTSC to VT/TPSSC

Note: The approval of this Standards Committee change request was included in the approval of the agenda and consent agenda and the following PARs and standards have been moved from VT/RTSC TO VT/TPSSC:

P2752 'Guide for Multi-Point Grounding System of Trains in Electrified Railway'
P2970 'Guide for Synchronous Monitoring of the Magnitude and Distribution of Stray Current in Urban Rail
Transit's Direct Current Traction System'

16 'Standard for Electrical and Electronic Control Apparatus on Rail Vehicles'
1478 'Standard for Environmental Conditions for Transit Rail Car Electronic Equipment'

2.1.3 Standards Committee Transfer Request for One Standard from VT/RTSC to VT/HSTMSC

Note: The approval of this Standards Committee change request was included in the approval of the agenda and consent agenda and the following standard has been moved from VT/RTSC TO VT/HSTMSC:

2753 'Guide for the Measurement of Pantograph Off-Line and Evaluation of Current Collection Performance for High Speed Railway'

2.1.4 Standards Committee Transfer Request for One Standard from BOG/SESCOM TO SEN/SC

Note: The approval of this Standards Committee change request was included in the approval of the agenda and consent agenda and the following standard has been moved from BOG/SESCOM TO SEN/SC:

2700 'Standard for Sensor Performance Parameter Definitions'

2.1.5 Project Number Change Request for P2975 'Standard for Industrial Artificial Intelligence (AI) Data Attributes'

Note: The approval of this project number change request for P2975 was included in the approval of the agenda and consent agenda and the PAR number for P2975 is now P2975.1.

2.1.6 Project Number Change Request for P1451.5p 'Standard for Radio Frequency Channel Specifications for Performance Assessment of Industrial Wireless Systems'

Note: The approval of this project number change request for P1451.5p was included in the approval of the agenda and consent agenda and the PAR number for P1451.5p is now P3388.

2.1.7 PAR for Administrative Withdrawal

Note: The approval of the administrative withdrawal of this PAR was included in the approval of the agenda and consent agenda, and the following PAR has been administratively withdrawn:

P9274.4.1 (C/LT)

Recommended Practice for the Implementation of the Experience Application Programming Interface (API) 1.0.3

3 Approval of Minutes from the 25 October 2022 NesCom Meeting

A motion was made to approve the minutes of the 25 October 2022 NesCom meeting. In the absence of objection, the motion was approved.

4 PARS FOR DISCUSSION

4.1 Modified PARs

IEEE Computer Society/Blockchain and Distributed Ledgers

P3219

Standard for Blockchain-based Zero-Trust Framework for Internet of Things (IoT)

Recommendation: Approve modified PAR

IEEE Computer Society/Learning Technology

P1484.2

Recommended Practices for Learning and Employment Record (LER) Ecosystems

Recommendation: Approve modified PAR

IEEE Computer Society/Microprocessor Standards Committee

P3109

Standard for Arithmetic Formats for Machine Learning

Recommendation: Approve modified PAR

IEEE Computer Society/Standards Activities Board

P2858

Recommended Practice for Mini-program Interoperability

Recommendation: Approve modified PAR

IEEE Consumer Technology Society/Digital Finance and Economy Standards Committee

P3812.1

Standard for General Requirements for Identity Framework for Metaverse

Recommendation: Approve modified PAR

IEEE Consumer Technology Society/Metaverse Standards Committee

P2048

Standard for Metaverse: Terminology, Definitions, and Taxonomy

Recommendation: Approve modified PAR

IEEE Engineering in Medicine and Biology Society/Standards Committee

P2418.6

Standard for a Framework for Web3 in Decentralized Trusted Work Flows in Healthcare and Life Sciences

Recommendation: Conditionally approve modified PAR; contingent upon removing the last phrase from the final sentence in the Need section of the PAR and ending the sentence after 'using Web3.'

Note: The condition has been met.

IEEE Geoscience and Remote Sensing Society/Standards Committee

P4002

Standard for Synthetic Aperture Radar Metadata Content

Recommendation: Approve modified PAR

IEEE Power and Energy Society/Analytic Methods for Power Systems

P1729

Recommended Practice for Electric Power Distribution System Analysis

Recommendation: Approve modified PAR

IEEE Power and Energy Society/Insulated Conductors

P2789

Guide for the Selection and Application of Cables Used in Enclosed Transit Infrastructure

Recommendation: Approve modified PAR

IEEE Power and Energy Society/Nuclear Power Engineering

P845

Guide for the Evaluation of Human-System Performance in Nuclear Power Generating Stations and Other Nuclear Facilities

Recommendation: Approve modified PAR

IEEE Power and Energy Society/Switchgear

PC37.10

Recommended Practice for Investigation, Analysis, and Reporting of Failures of AC High-Voltage Circuit Breakers and Circuit Switchers with Rated Maximum Voltage Above 1000 V

Recommendation: Approve modified PAR (15 approve, 0 disapprove, 1 abstain [Edwards])

PC37.14

Standard for Low-Voltage DC (3200 V and below) Power Circuit Breakers Used in Enclosures **Recommendation:** Approve modified PAR (15 approve, 0 disapprove, 1 abstain [Edwards])

PC37.20.7

Recommended Practice for Testing Switchgear with Rated Voltages Up to 52 kV for Internal Arcing Faults

Recommendation: Approve modified PAR (14 approve, 0 disapprove, 2 abstain [Edwards, Wright])

IEEE Power and Energy Society/Transformers

PC57.107

Recommended Practice for Developing Short-Term Overexcitation V/Hz Curves for Transformers Directly Connected to Generators

Recommendation: Approve modified PAR

IEEE SA Board of Governors/International Committee on Electromagnetic Safety

P62209-3

Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Part 3: Vector measurement-based systems (Frequency range of 300 MHz to 6 GHz)

Recommendation: Approve modified PAR

IEEE Society on Social Implications of Technology/Social Implications of Technology Standards Committee

P7016

Standard for Ethically Aligned Design and Operation of Metaverse Systems

Recommendation: Approve modified PAR

4.2 Extension Requests

IEEE Microwave Theory and Techniques Society/Standards Committee

P2822

Recommended Practice for Microwave, Millimeter-wave and THz On-Wafer Calibrations, De-Embedding and Measurements

Recommendation: Approve request for an extension until December 2024

4.3 New PARs

IEEE Computer Society/Artificial Intelligence Standards Committee

P3347

Standard for Description Schemas for Neural Network Architectures **Recommendation:** Approve new PAR until December 2027

P3348

Recommended Practice for the Framework and Evaluation Methods of Two-Dimensional (2D) Real-Person Digital Clothes Model Generation System Based on Artificial Intelligence

Recommendation: Approve new PAR until December 2027

IEEE Computer Society/Cybersecurity and Privacy Standards Committee

P2883.2

Recommended Practice for Virtualized and Cloud Storage Sanitization **Recommendation:** Approve new PAR until December 2027

P3349

Standard for Space System Cybersecurity

Recommendation: Approve new PAR until December 2027

IEEE Computer Society/Learning Technology

P9274.3.1

Standard for Packaging, Launch, and Run-time of Experience Application Programming Interface (xAPI) in Session-based Learning

Recommendation: Approve new PAR until December 2027

IEEE Computer Society/Online Gaming Standards Committee

P3341

Recommended Practice for Mobile Game Experience Indicators and Evaluation Criteria **Recommendation:** Approve new PAR until December 2027

IEEE Computer Society/Smart Manufacturing Standards Committee

P2975.2

Standard for Model Verification & Validation of Industrial Artificial Intelligence Systems **Recommendation:** Approve new PAR until December 2027 (14 approve, 0 disapprove, 1 abstain [Wei])

P2975.3

Recommended Practice for Software Framework for Industrial Artificial Intelligence (AI) At-the-edge

Recommendation: Approve new PAR until December 2027 (14 approve, 0 disapprove, 1 abstain [Wei])

IEEE Computer Society/Software & Systems Engineering Standards Committee

P82079-2

Preparation of information for use (instructions for use) of products--Part 2: Assembly of self-assembly products

Recommendation: Approve new PAR until December 2027

IEEE Computer Society/Standards Activities Board

P3158.1

Standard for Testing and Performance of a Trusted Data Matrix System

Recommendation: Approve new PAR until December 2027 (14 approve, 0 disapprove, 1 abstain [Wei])

P3329

Standard for Quantum Computing Energy Efficiency

Recommendation: Approve new PAR until December 2027

IEEE Engineering in Medicine and Biology Society/Standards Committee

P3337

Standard for Accessible Intelligent Cyber-physical Systems (AICS) for Wellbeing **Recommendation:** Defer new PAR until the next NesCom meeting to provide time for continued discussion and clarification of the PAR (5 approve, 2 disapprove, 8 abstain)

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

P3001.1

Recommended Practice for the Planning and Design of Industrial and Commercial Power Systems **Recommendation:** Approve new PAR until December 2027

IEEE Power and Energy Society/Nuclear Power Engineering

P62671

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

Recommendation: Approve new PAR until December 2027

IEEE Power and Energy Society/Switchgear

PC37.20.9a

Standard for Metal-Enclosed Switchgear Rated 1 kV to 52 kV Incorporating Gas Insulating Systems Amendment: Clarification of metal-enclosed gas-insulated switchgear (MEGIS) types covered and production test

Recommendation: Approve new PAR until December 2027 (14 approve, 0 disapprove, 1 abstain [Edwards])

IEEE Power and Energy Society/Transmission and Distribution

P1159.3-2019/Cor 1

Recommended Practice for Power Quality Data Interchange Format (PQDIF) - Corrigendum 1

Recommendation: Approve new PAR until December 2027

IEEE Robotics and Automation Society/Standing Committee for Standards

P3345

Guide for Terminology and Classification of Electric Vehicle Charging Robots

Recommendation: Approve new PAR until December 2027

P3346

Guide for General Requirements of Electric Vehicle Charging Robots

Recommendation: Approve new PAR until December 2027

IEEE SA Board of Governors/Corporate Advisory Group

P3182

Standard for a Unified Terminology and Framework for Percutaneous and Non-Fluoroscopic Technology (PAN technology) in Cardiovascular Diseases

Recommendation: Approve new PAR until December 2027

IEEE Signal Processing Society/Synthetic Aperture Standards Committee

P3339

Recommended Practice for Aperture Synthesis of Architectural Instantiations of Radiometer Arrays **Recommendation:** Approve new PAR until December 2027

P3343

Standard for Field-Portable Synthetic Apertures

Recommendation: Approve new PAR until December 2027

IEEE Society on Social Implications of Technology/Social Implications of Technology Standards Committee

P7016.1

Standard for Ethically Aligned Educational Metadata in Extended Reality (XR) & Metaverse **Recommendation:** Defer new PAR until the next NesCom meeting to provide time to update the PAR (9 approve, 3 disapprove, 2 abstain)

P7801

Recommended Practice for Technical Knowledge Commons Initiatives and Platforms **Recommendation:** Approve new PAR until December 2027

IEEE Vehicular Technology Society/Intelligent Transportation Systems

P3344

Standard for Scenario Description Language for Autonomous Driving

Recommendation: Approve new PAR until December 2027

IEEE Vehicular Technology Society/Traction Power Systems Standards Committee

P3340

Guide for the Design of Rail Vehicle Maintenance Facility Direct Current Power Distribution Systems **Recommendation:** Approve new PAR until December 2027

4.4 PARs for the Revision of Standards

IEEE Computer Society/Cloud Computing Standards Committee

P2301

Guide for Cloud Portability and Interoperability Profiles (CPIP)

Recommendation: Approve PAR for the revision of a standard until December 2027

IEEE Microwave Theory and Techniques Society/Standards Committee

P1765

Recommended Practice for Estimating the Uncertainty in Error Vector Magnitude of Measured Digitally Modulated Signals for Wireless Communications: Conducted and Over-the-Air Hardware Verification

Recommendation: Approve PAR for the revision of a standard until December 2027

IEEE Power and Energy Society/Nuclear Power Engineering

P352

Guide for General Principles of Reliability Analysis of Nuclear Power Generating Station Systems and Other Nuclear Facilities

Recommendation: Approve PAR for the revision of a standard until December 2027

P649

Standard for Qualifying Class 1E Motor Control Centers for Nuclear Facilities

Recommendation: Approve PAR for the revision of a standard until December 2027

IEEE Power and Energy Society/Power System Relaying and Control

PC37.103

Guide for Differential and Polarizing Relay Circuit Testing

Recommendation: Approve PAR for the revision of a standard until December 2027

IEEE Power and Energy Society/Switchgear

PC37.13.1

Standard for Definite-Purpose Switching Devices for Use in Metal-Enclosed Low-Voltage (600 V AC and Below) Power Circuit Breaker Switchgear

Recommendation: Approve PAR for the revision of a standard until December 2027 (13 approve, 0 disapprove, 1 abstain [Edwards])

PC37.21

Standard for Control Switchboards

Recommendation: Approve PAR for the revision of a standard until December 2027 (13 approve, 0 disapprove, 1 abstain [Edwards])

IEEE Power and Energy Society/Transformers

PC57.12.34

Standard Requirements for Pad-Mounted, Compartmental-Type, Self-Cooled, Three-Phase Distribution Transformers, 10 MVA and Smaller; High-Voltage, 34.5 kV Nominal System Voltage and Below; Low-Voltage, 15 kV Nominal System Voltage and Below

Recommendation: Approve PAR for the revision of a standard until December 2027

PC57.32

Standard for Requirements, Terminology, and Test Procedures for Neutral Grounding Devices **Recommendation:** Approve PAR for the revision of a standard until December 2027

IEEE Power and Energy Society/Transmission and Distribution

Guide for the Design and Testing of Transmission Modular Restoration Structure Components **Recommendation:** Approve PAR for the revision of a standard until December 2027

IEEE Vehicular Technology Society/Rail Transportation Standards Committee

P1478

Standard for Environmental Conditions for Transit Railcar Electronic Equipment **Recommendation:** Approve PAR for the revision of a standard until December 2027

5 OLD BUSINESS

There was no old business.

6 NEW BUSINESS

There was no new business.

7 DATE OF NEXT MEETING

The next meeting of NesCom is scheduled to occur on 28 March 2023 in Mexico City, Mexico and by teleconference.

8 ADJOURNMENT

Chair Stanley thanked the NesCom members for all of their work to help make significant progress on the PARs, and she thanked Lisa Weisser. She wished the incoming 2023 NesCom members well and thanked the members who are leaving NesCom. Guido Hiertz mentioned that he was thankful working with Chair Stanley on NesCom, and wished her well on the IEEE SA Board of Governors. He added that he looks forward to working with the 2023 NesCom Chair, Lei Wang. Annette Reilly also thanked Chair Stanley for her great leadership of the meetings. Daleep Mohla also congratulated Chair Stanley and added thanks to the myProject team for adding the functionality of the 'next and back' buttons.

There being no further business, the meeting was adjourned at 11:26 a.m. ET (UTC-5).