



# NesCom - 20 Sep 2023

Agenda Version: 4 20 September 2023 Time: 9:00 a.m. – 12:30 p.m. ET (UTC-4) Location: Teleconference

# **1. CALL TO ORDER**

# 2. REVIEW OF AGENDA

# **2.1. CONSENT AGENDA**

# 2.1.1. WITHDRAWAL REQUESTS

#### **IEEE Computer Society/Standards Activities Board**

#### 1. P2850

Standard for an Architectural Framework for Intelligent Cities Operation System

# **IEEE Consumer Technology Society/Blockchain Standards Committee**

#### 2. P2141.1

Standard for the Use of Blockchain in Anti-Corruption Applications for Centralized Organizations

# 3. P2141.2

Standard for Transforming Enterprise Information Systems from Centralized Architecture into Blockchain-based Decentralized Architecture

#### 4. P2141.3

Standard for Transforming Enterprise Information Systems from Distributed Architecture into Blockchain-based Decentralized Architecture

#### 5. P2147.1

Standard for Requirements of Integrated Consortium Chain Station

#### 6. P2418.8

Standard for Blockchain Applications in Governments

#### 7. P2677.1

Standard for Blockchain-based Omnidirectional Pandemic/epidemic Surveillance: Overarching Framework

#### 8. P2677.10

Standard for Blockchain-based Omnidirectional Pandemic/epidemic Surveillance: Access to Personal Data

#### 9. P2677.11

Standard for Blockchain-based Omnidirectional Pandemic/epidemic Surveillance: Access to Telecommunications Data

#### 10. P2677.12

Standard for Blockchain-based Omnidirectional Pandemic/epidemic Surveillance: Access to Transportation Data

#### 11. P2677.20

Standard for Blockchain-based Omnidirectional Pandemic/epidemic Surveillance: Requirements for Blockchain Infrastructure

# 12. P2677.21

Standard for Blockchain-based Omnidirectional Pandemic/epidemic Surveillance: Requirements for

Peer-to-Peer Storage Infrastructure

# 13. P2677.22

Standard for Blockchain-based Omnidirectional Pandemic/epidemic Surveillance: Requirements for Grid Computing Infrastructure

#### 14. P2677.30

Standard for Blockchain-based Omnidirectional Pandemic/epidemic Surveillance: Personal Application Programming Interface

# 15. P2677.31

Standard for Blockchain-based Omnidirectional Pandemic/epidemic Surveillance: Healthcare Application Programming Interface

# 16. P2677.32

Standard for Blockchain-based Omnidirectional Pandemic/epidemic Surveillance: Government Application Programming Interface

# IEEE Consumer Technology Society/Emerging Technology Standards Committee

# 17. P2040

Standard for General Requirements for Fully Automated Vehicles Driving on Public Roads

#### 18. P2040.1

Taxonomy and Definitions for Connected and Automated Vehicles

# 19. P2040.2

Recommended Practice for Multi-Input Based Decision Making of Automated Vehicles Driving on Public Roads

# 20. P2040.3

Recommended Practice for Permitting Automated Vehicles to Drive on Public Roads

# 21. P2049.1

Standard for Human Augmentation: Taxonomy and Definitions

# 22. P2049.2

Standard for Human Augmentation: Privacy and Security

#### 23. P2049.3

Standard for Human Augmentation: Identity

#### 24. P2049.4

Standard for Human Augmentation: Methodologies and Processes for Ethical Considerations

#### 25. P2788

Standard for Circulating Air Pressure Physiotherapy Equipment Used in the Home Healthcare Environment

#### 26. P2823

Standard for System Architecture and Technical Requirements for Smart Speakers

#### 27. P2876

Recommended Practice for Inclusion, Dignity and Privacy in Online Gaming

#### 28. P2886

Standard for General Requirements for Smart Residential Water Systems

#### **IEEE Power and Energy Society/Electric Machinery**

#### 29. P1776

Recommended Practice for Thermal Evaluation of Unsealed or Sealed Insulation Systems for AC Electric Machinery Employing Form-Wound Pre-Insulated Stator Coils for Machines Rated 15 000 V and Below

#### **IEEE Power and Energy Society/Transmission and Distribution**

#### 30. P1656

Guide for Testing the Electrical, Mechanical, and Durability Performance of Wildlife Protective Devices

on Overhead Power Distribution Systems Rated up to 38 kV

# IEEE Vehicular Technology Society/Automated Vehicles Standards Committee

# 31. P2936

Standard for Test Methods of Automotive Lidar Performance

IEEE Vehicular Technology Society/Intelligent Transportation Systems

# 32. P1609.13

Wireless Access in Vehicular Environments - Reliable Data Transport Mechanisms for Multiple Receivers

## 33. P1609.20

Recommended practice for extending the functionality of IEEE Std 1609.2

# **2.1.2. PROJECT NUMBER CHANGE REQUESTS**

# 2.1.2.1. IEEE COMPUTER SOCIETY/SOFTWARE & SYSTEMS ENGINEERING STANDARDS COMMITTEE (C/S2ESC) HAS REQUESTED TO CHANGE P982.1 TO P982.

# 3. APPROVAL OF MINUTES FROM THE 28 JUNE 2023 MEETING

623nescom-meeting-minutes.pdf

# 4. PARS FOR DISCUSSION

# **4.1. MODIFIED PARS**

# **IEEE Computer Society/LAN/MAN Standards Committee**

#### 1. P60802

Time-Sensitive Networking Profile for Industrial Automation

**IEEE Computer Society/Microprocessor Standards Committee** 

## 2. P3120

Standard for Quantum Computing Architecture

#### **IEEE Computer Society/Software & Systems Engineering Standards Committee**

#### 3. P7003

Algorithmic Bias Considerations

**IEEE Electromagnetic Compatibility Society/Standards Development Committee** 

# 4. P2717

Recommended Practice for Passive Intermodulation Test Methods for Wireless Systems in Low Noise Environments

#### **IEEE Photonics Society/Standards Committee**

#### 5. P3111

Recommended Practice for Test and Inspection of Laser Devices Used for Remote Removal of Foreign Matter in Public Infrastructure Equipment

# 6. P3324

Guide for Blue-green Laser Communication System for Industrial Underwater Operations - Generic Specification

#### 7. P3325

Guide for General Requirement for Industrial UV Detection Equipment

# **IEEE Power and Energy Society/Insulated Conductors**

# 8. P1186

Recommended Practice for Applicability of Methods for the Evaluation of Low Voltage and Medium Voltage Installed Cable Systems in Nuclear Facilities

# 9. P1793

Guide for Planning and Designing, and Installation of Transition Facilities between Overhead and

Underground Transmission Lines

# **IEEE Power and Energy Society/Nuclear Power Engineering**

## 10. P2421

Guide for Designing and Developing Computer-Based Displays for Monitoring and Control of Nuclear Facilities

**IEEE SA Board of Governors/Distributed Generation, Energy Storage and Interoperability Standards Committee** 

## 11. P2030

Guide for Smart Grid Interoperability of Energy Technology and Information Technology Operation with the Electric Power System (EPS), End-Use Applications, and Loads

## IEEE Vehicular Technology Society/Intelligent Transportation Systems

# 12. P3344

Standard for Scenario Representation for Autonomous Driving

# **4.2. EXTENSION REQUESTS**

**IEEE Communications Society/Dynamic Spectrum Access Networks Standards Committee** 

# 1. P1900.5

Standard for Requirements and System Architectures for Dynamic Spectrum Access Systems

# **IEEE Computer Society/Artificial Intelligence Standards Committee**

#### 2. P2840

Standard for Responsible AI Licensing

# **IEEE Computer Society/LAN/MAN Standards Committee**

#### 3. P802.1DG

Time-Sensitive Networking Profile for Automotive In-Vehicle Ethernet Communications

#### 4. P802.1Qdj

Standard for Local and Metropolitan Area Networks--Bridges and Bridged Networks Amendment: Configuration Enhancements for Time-Sensitive Networking

# 5. P802.11be

Standard for Information technology--Telecommunications and information exchange between systems Local and metropolitan area networks--Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications Amendment: Enhancements for Extremely High Throughput (EHT)

#### **IEEE Computer Society/Learning Technology**

#### 6. P2247.2

Interoperability Standards for Adaptive Instructional Systems (AISs)

#### 7. P7004

Standard for Child and Student Data Governance

#### 8. P9274.4.2

Recommended Practice for Cybersecurity in the Implementation of the Experience Application Programming Interface (xAPI)

IEEE Computer Society/Simulation Interoperability Stds Organization/Stds Activity Committee

#### 9. P1516

Standard for Modeling and Simulation (M&S) High Level Architecture (HLA)-- Framework and Rules

## 10. P1516.1

Standard for Modeling and Simulation (M&S) High Level Architecture (HLA)-- Federate Interface Specification

#### 11. P1516.2

Standard for Modeling and Simulation (M&S) High Level Architecture (HLA)-- Object Model Template (OMT) Specification

### **IEEE Computer Society/Software & Systems Engineering Standards Committee**

# 12. P7003

Algorithmic Bias Considerations

**IEEE Computer Society/Test Technology** 

#### 13. P2427

Standard for Analog Defect Modeling and Coverage

**IEEE Education Society/Standards Committee** 

## 14. P2834

Standard for Secure and Trusted Learning Systems

**IEEE Engineering in Medicine and Biology Society/Standards Committee** 

#### 15. P2933

Standard for Clinical Internet of Things (IoT) Data and Device Interoperability with TIPPSS - Trust, Identity, Privacy, Protection, Safety, Security

#### **IEEE Industrial Electronics Society/Industrial Electronics Society Standards Committee**

#### 16. P2023

Standard for Digital Transformation Architecture and Framework

#### 17. P2805.1

Self-Management Protocols for Edge Computing Node

#### 18. P2805.2

Data acquisition, Filtering and buffering Protocols for Edge Computing Node

#### 19. P2805.3

Cloud-Edge Collaboration Protocols for Machine Learning

#### 20. P21451-1-6

Standard for a Smart Transducer Interface for Sensors, Actuators, and Devices - Message Queue Telemetry Transport (MQTT) for Networked Device Communication

#### **IEEE Industry Applications Society/Petroleum & Chemical Industry**

#### 21. P60079-30-1

International Standard - Explosive atmospheres -- Part 30-1: Electrical resistance trace heating -- General and testing requirements

### 22. P60079-30-2

International Standard for Explosive atmospheres -- Part 30-2: Electrical resistance trace heating -- Application guide for design, installation and maintenance

#### **IEEE Instrumentation and Measurement Society/TC9 - Sensor Technology**

#### 23. P1451.9

Standard for Tidal Turbine Health Monitoring System (HMS) with Communication Protocols and Transducer Electronic Data Sheet (TEDS) Formats

#### 24. P1451.99

Standard for Harmonization of Internet of Things (IoT) Devices and Systems

#### **IEEE Power and Energy Society/Electric Machinery**

#### 25. PC50.13

Standard for 50 and 60 Hz Synchronous Generators for Non-Hydraulic Applications Rated 10 MVA and Above

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

#### 26. P1679.4

Guide for the characterization and evaluation of alkaline batteries in stationary applications

**IEEE Power and Energy Society/Nuclear Power Engineering** 

Standard for Electric Penetration Assemblies in Containment Structures for Nuclear Power Generating Stations

# 28. P833

Recommended Practice for the Protection of Electric Equipment in Nuclear Power Generating Stations from Water Hazards

# 29. P1289

Guide for the Application of Human Factors Engineering in the Design of Computer-Based Monitoring and Control Displays for Nuclear Power Generating Stations and other Nuclear Facilities

# 30. P2425

Standard for Electromagnetic Compatibility Testing of Electrical and Instrumentation and Control Equipment at Nuclear Power Generating Stations and Other Nuclear Facilities

# 31. P63160

Nuclear Power Plants - Instrumentation, Control and Electrical Power Systems Important to Safety - Common Cause Failure Systems Analysis and Diversity

#### **IEEE Power and Energy Society/Power System Instrumentation and Measurements**

# 32. P4.1

Guide for the Practical Implementation of IEEE Standard 4 on High-Voltage and High-Current Measurement Systems

# **IEEE Power and Energy Society/Substations**

#### 33. P1240

Guide for the Evaluation of the Reliability of HVDC Converter Stations

# 34. P2825

Guide for Static Synchronous Series Compensator (SSSC) General Requirements and Test Methods

# **IEEE Power and Energy Society/Transformers**

#### 35. PC57.13.9

Standard for Power-Line Carrier Coupling Capacitors and Coupling Capacitor Voltage Transformers

## 36. PC57.142

Guide to Describe the Occurrence and Mitigation of Switching Transients Induced by Transformers, Switching Device, and System Interaction

#### 37. PC57.143

Guide for Application of Monitoring Equipment to Liquid-Immersed Transformers and Components

# **IEEE Power and Energy Society/Transmission and Distribution**

#### 38. PC135.100

Standard for Line Hardware for Overhead Line Construction

#### **IEEE Reliability Society/IEEE Reliability**

#### 39. P7009

Standard for Fail-Safe Design of Autonomous and Semi-Autonomous Systems

#### **IEEE Robotics and Automation Society/Standing Committee for Standards**

#### 40. P1872.1

Robot Task Representation

# 41. P2817

Guide for Verification of Autonomous Systems

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

# 42. P7012

Standard for Machine Readable Personal Privacy Terms

#### 43. P7014

Standard for Ethical considerations in Emulated Empathy in Autonomous and Intelligent Systems

# IEEE Systems, Man, and Cybernetics Society/Standards Committee

# 44. P2814

Techno-economics Metrics Standard for Hybrid Energy and Storage Systems

# IEEE Vehicular Technology Society/Communications Based Train Control and Signals

### 45. P1474.1

Standard for Communications-Based Train Control (CBTC) Performance and Functional Requirements

# 46. P1474.2

Standard for User Interface Requirements in Communications-Based Train Control (CBTC) Systems

# 47. P1474.3

Recommended Practice for Communications-Based Train Control (CBTC) System Design and Functional Allocations

# IEEE Vehicular Technology Society/Intelligent Transportation Systems

# 48. P1920.2

Standard for Vehicle to Vehicle Communications for Unmanned Aircraft Systems

# 4.3. NEW PARS

IEEE Broadcast Technology Society/Broadcast Technology Standards Committee

# 1. P3420

Standard for Aggregated Content Delivery Link Protocol for Radio and Other Audio and Data Services

# 2. P3421

Recommended Practice on Spectrum Mask Measurement for Broadcast Transmissions

**IEEE Communications Society/Edge, Fog, Cloud Communications with IOT and Big Data Standards Committee** 

# 3. P1945

Standard for IOT Edge Computing on Unmanned Aircraft Systems-PART 1 General Requirements

**IEEE Communications Society/Unmanned Aerial Vehicles Communications Standards Committee** 

#### 4. P1937.13

Standard for Taxonomy and associated requirements for Unmanned Aircraft System's autonomy levels

#### 5. P1937.15

Standard for Communication Security Requirements for Drone Formation Flying Light Show

# 6. P1937.16

Standard for Civil UAS Cybersecurity Framework

# 7. P1937.17

Standard for specifications for lithium ion cells and batteries used in Unmanned Aircraft  $\square$  Systems (UAS)

#### 8. P1937.18

Charger Used in Unmanned Aircraft Systems - Technical Specification

#### **IEEE Computer Society/Artificial Intelligence Standards Committee**

# 9. P3394

Standard for Large Language Model Application and Agent Interface

# 10. P3395

Standard for the Implementation of Behavioral Guard Rails for Artificial Intelligence (AI) Models

# 11. P3396

Recommended Practice for Defining and Evaluating Artificial Intelligence (AI) Risk, Safety, Trustworthiness, and Responsibility

#### 12. P3398

Recommended Practice for Generative Pre-trained Transformer Empowered Software Engineering Life Cycle

# 13. P3403

Recommended□ Practice on Data Processing for Training Large Language Models

# 14. P3410

Standards for Large Scale Financial Risk Models

# 15. P3417

Standard for Requirements of Differential Privacy-Based Personal Information Protection

# 16. P3419

Standard for Large Language Model Evaluation

# **IEEE Computer Society/Cybersecurity and Privacy Standards Committee**

# 17. P3406

Standard for a Purge and Destruct Sanitization Framework

# 18. P3409

Standard for a Zero Trust Security Framework

# **IEEE Computer Society/Data Compression Standards Committee**

# 19. P3161.2

Standard for End Subsystem of Digital Retina Systems

# 20. P3161.3

Standard for Edge Subsystem of Digital Retina Systems

# 21. P3161.4

Standard for Cloud Subsystem of Digital Retina Systems

# 22. P3161.8

Standard for Security and Privacy Protection of Digital Retina Systems

# 23. P3404

Requirements and Framework for Data and Model Sharing across Multiple Computing Centers

# **IEEE Computer Society/LAN/MAN Standards Committee**

## 24. P802.1Qdy

IEEE Standard for Local and Metropolitan Area Networks--Bridges and Bridged Networks Amendment: YANG for the Multiple Spanning Tree Protocol

## 25. P802.11bn

IEEE Standard for Information Technology--Telecommunications and Information Exchange between Systems - Local and Metropolitan Area Networks--Specific Requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications Enhancements for Ultra High Reliability

#### 26. P802.11-2020/Cor 2

IEEE Standard for Information Technology--Telecommunications and Information Exchange between Systems - Local and Metropolitan Area Networks--Specific Requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications - Corrigendum 2- Correct the Number Assignment of the Information Identifier (ID) for Enhanced Broadcast Services (EBCS) element of the Access Network Query Protocol (ANQP)

# **IEEE Computer Society/Online Gaming Standards Committee**

# 27. P3391

Standard for Technical Requirements for Mobile Game Quality

# **IEEE Computer Society/Software & Systems Engineering Standards Committee**

# 28. P3407

Standard for End-to-End Software Testing Automation Tools

## **IEEE Computer Society/Standards Activities Board**

# 29. P3422

Recommended Practice for Metaverse Ecosystem Reference

## **IEEE Computer Society/Test Technology**

# 30. P3405

Standard for Chiplet Interconnect Test and Repair

## **IEEE Consumer Technology Society/Smart Devices Standards Committee**

## 31. P3402

Standard for Technical Requirements of AI-based Driver Behavior Detection Systems

# 32. P3408

Standard for Security Specifications for Wearable Devices Supporting Payment Services

# 33. P3414

Standard for Ergonomics Assessment and Technical Specification for Vehicle Displays

**IEEE Electromagnetic Compatibility Society/Standards Development Committee** 

#### 34. P1848.1

Standard for Techniques & Measures to Manage Functional Safety and Other Risks With Regard to Electromagnetic Disturbances – Machinery Sector

# **IEEE Engineering in Medicine and Biology Society/Standards Committee**

#### 35. P3386

Standard for Defining and Inferring User Accessibility Needs for Applications including Augmented Reality and Artificial Intelligence Systems

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

## 36. P3005.2

Recommended Practice for Application of Generator Systems for Emergency and Standby Power in Industrial and Commercial Power Systems.

**IEEE Instrumentation and Measurement Society/TC9 - Sensor Technology** 

#### 37. P1451.7

Standard for a Smart Transducer and Radio Frequency Identification (RFID) Systems Communication Protocols and Transducer Electronic Data Sheet Formats for Industrial Internet of Things (IIoT)

# **IEEE Power and Energy Society/Insulated Conductors**

#### 38. P2776

Guide for Specifying and Selecting Cables for Nuclear Facilities

**IEEE Power and Energy Society/Power System Instrumentation and Measurements** 

# 39. P3415

Guide for Sampling Evaluation of the State of Operating Electrical Energy Meters

**IEEE Power and Energy Society/Transmission and Distribution** 

#### 40. P3418

Guide for the Selection of Permanent Grounding Components for Overhead Transmission Lines

# **IEEE Power Electronics Society/Standards Committee**

#### 41. P3380

Recommended Practice for Alternating Current (AC) Power System Stability in Critical Facilities

#### IEEE SA Board of Governors/Corporate Advisory Group

#### 42. P3411

Standard for Smart Identification in Internet of Things

# 43. P3416

Guide for Test Sets and Tools for Testing Protective Relays

## **IEEE Signal Processing Society/Synthetic Aperture Standards Committee**

## 44. P3397

Standard for Synthetic Aperture Radar (SAR) Image Quality Metrics

#### 45. P3399

Standard for Performance Metrics for Automotive Synthetic Aperture Radar (SAR)

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

#### 46. P7803

Recommended Practice for Inclusive Sustainable Smart Cities

#### **IEEE Vehicular Technology Society/Intelligent Transportation Systems**

#### 47. P1609.3-2020/Cor 1

IEEE Standard for Wireless Access in Vehicular Environments (WAVE)--Networking Services - Corrigendum 1WSA Security Profiles Updates

#### 48. P3412

Standard for Autonomous Driving Architecture (ADA)

#### **IEEE Vehicular Technology Society/Traction Power Systems Standards Committee**

#### 49. P3393

Recommended Practice on the Application of IEEE Std 1653.2, Standard for Uncontrolled Traction Power Rectifiers for Substation Applications up to 1500 V DC Nominal Output, to Power Components other than Rectifiers

#### **4.4. PARS FOR THE REVISION OF STANDARDS**

#### **IEEE Aerospace and Electronic Systems Society/Gyro Accelerometer Panel**

#### 1. P836

Recommended Practice for Precision Centrifuge Testing of Linear Accelerometers

**IEEE Computer Society/Software & Systems Engineering Standards Committee** 

#### 2. P12207

Systems and software engineering -- Software life cycle processes

#### **IEEE Industry Applications Society/Petroleum & Chemical Industry**

#### 3. P1242

Guide for Specifying and Selecting Power, Control, and Special-Purpose Cable for Petroleum and Chemical Plants

**IEEE Power and Energy Society/Insulated Conductors** 

#### 4. P400.4

Guide for Field Testing of Shielded Power Cable Systems Rated 5 kV and Above with Damped Alternating Current (DAC) Voltage

#### **IEEE Power and Energy Society/Nuclear Power Engineering**

#### 5. P628

Standard Criteria for the Design, Installation, and Qualification of Raceway Systems for Class 1E Circuits for Nuclear Power Generating Stations

#### 6. P690

Standard for Design and Installation of Cable Systems for Class 1E Circuits in Nuclear facilities

#### 7. P60780-323

IEC/IEEE International Standard - Nuclear facilities -- Electrical equipment important to safety -- Qualification

# **IEEE Vehicular Technology Society/Communications Based Train Control and Signals**

#### 8. P1474.4

Recommended Practice for Functional Testing of a Communications-Based Train Control (CBTC) System

## **5. OLD BUSINESS**

# **5.1. DISCUSSION RE: NESCOM CONVENTION 8**

Oliver Holland Discussion Regarding NesCom Convention 8 .pdf

# 5.2. DISCUSSION RE: NESCOM ASSESSMENT OF NON-TECHNICAL STANDARDS PROPOSALS

NesCom-Discussion-Non-technical PARs (2).pptx

# 5.3. DISCUSSION RE: PAR WITHDRAWAL REQUESTS AS PART OF THE NESCOM CONSENT AGENDA

# 5.4. PROPOSAL TO INTRODUCE 'VOID' IN THE NESCOM AGENDA WHEN A PAR IS REMOVED FROM THE AGENDA

# **6. NEW BUSINESS**

# **7. NEXT MEETING**

The next meeting of NesCom will take place on or about 24 October 2023 and will be virtual only. The submittal deadline is 13 September 2023.

# 8. ADJOURNMENT