May 2025

Report on Day 4 of the DSW 2025 – the 98th meeting of IEEE DTSWG -

Abstract

On 10 April 2025, the fourth day of DSW2025 in Chennai, the 98th meeting of the IEEE P3800 Data Trading System Working Group (DTSWG) was convened, alongside an award ceremony and a keynote session on IEEE SA's engagement in India. The day highlighted ongoing efforts to standardize data trading systems, recognize contributors to IEEE P3800-2024, and promote broader participation in global standards development from India and Asia.

The DTSWG session, chaired by Dr. Hiroshi Mano, provided an orientation on the IEEE standardization process and the architecture of the data trading system (DTS), with emphasis on layered design, interoperability, and market-driven specifications. The group also discussed the protocol and object framework defined in IEEE P3800.1, currently under development.

The award ceremony honored individuals for their contributions to the IEEE P3800 standard, marking a milestone in the publication and community-building process.

In the keynote address, Sri Chandrasekharan, Country Head of IEEE India, presented IEEE SA's vision for inclusive, trusted, and impactful standardization. He introduced participation models, lifecycle processes, and programs like Industry Connections and IEEE SA Open, positioning IEEE as a key enabler of global and national technology governance.

The day reaffirmed the importance of collaborative, transparent, and implementation-oriented standardization efforts—anchoring India's growing role in shaping the global data ecosystem.

This was a typical Working Group (WG) meeting. Agendas, contributions, and meeting minutes are managed through the IEEE SA collaboration tool, iMeetCentral. An overview of these materials is available at the following site:

https://sagroups.ieee.org/3800/meetings/

If you wish to participate in the DTSWG, please contact the WG Chair, Hiroshi Mano.

4.2 DTSWG Standardization (orientation)

Hiroshi Mano, Chair of the IEEE P3800 Data Trading System Working Group (DTS WG), delivered a detailed presentation on **standardization processes** and the development of data trading system standards **under the IEEE framework**. Drawing on his decades of experience in wireless communication standards and leadership in IEEE 802.11ai, he provided a comprehensive overview of the **principles, methodologies**, and **organizational structures** that support successful global standardization efforts.

(see d4_IEEE_DTS_workshop_20250410.pdf)

Mano emphasized that **layered architecture design** and clear **interface definition** are foundational to standardization, preventing system lock-in and improving interoperability. He underscored the importance of **market-driven standards -** those with **broad applicability, backward compatibility, technical and economic feasibility**, and a **distinct identity**.

Using IEEE 802.11 (Wi-Fi) as a case study, Mano illustrated how successful standards create **market expansion, global adoption**, and **ecosystem-wide collaboration**—highlighting how early participation in standards development can shape industry outcomes. He explained that good technology alone does not create markets; rather, shared **problem statements**, **harmonization**, and **consensus-driven governance** are necessary.

A key portion of the presentation focused on IEEE's two standardization models: the **Individual Method** (experts represent themselves and vote independently) and the **Entity Method** (organizations vote as one unit). He also outlined the **IEEE 3800-2024** standard, which defines a reference model for data trading systems (DTS) that support multi-stakeholder data exchange through **principled, domain-independent marketplaces**.

Mano then introduced **IEEE P3800.1**, which specifies the **protocol and object framework** necessary to implement DTS operationally. This includes definitions for stakeholders (data providers, users, operators, and trusted third parties) and **data objects** (datasets, trading terms, catalogs, and trust information). The goal is to ensure **interoperability**, support **regulatory compliance**, and facilitate **wider adoption** of data trading infrastructure.

He concluded by advocating for increased **global participation**, urging stakeholders to engage with **IEEE working groups**, contribute to the drafting process, and uphold transparency and fairness as outlined in Robert's Rules of Order.

Q&A Highlights

Q: Why doesn't the IEEE use the term "can" in standards?

A: IEEE normative documents only use "shall" (mandatory), "should" (recommended), and "may" (optional). "Can" is considered informal and ambiguous in normative text; "can" refers to capability, it lacks the precise normative meaning needed in standards.

Q: How can one participate in the DTS Working Group and access related documents? Also, what is the upcoming schedule for IEEE P3800.1?

A: If you attend a DTS Working Group meeting and register your email address, you will be added to the official roster. This grants you access to iMeetCentral, the collaborative groupware platform, where you can view draft documents, meeting minutes, and contribution materials. The ongoing standard, IEEE P3800.1, is aiming for completion and approval by the end of 2025. The draft will be refined over the course of several upcoming meetings.

Q: Clarification on motion handling and repeatability during standard development.

A: Motions are governed by Robert's Rules; once a motion is passed, it cannot be reconsidered in the same session unless a motion to reconsider is formally made.

4.3 Award Ceremony

Following the completion of official business for the IEEE DTS Working Group, an Award Ceremony was held to recognize individuals for their outstanding contributions to the development of **IEEE 3800-2024**.

Awardees included:

Dipankar Chakrabarti, Gopal Tadepalli, Kohtaro Asai, Nobuyuki Ogura, Xiaomi An (online), Stefano De Panfilis (Absent), Ryuji Suzuki (Absent), Wen Wei (Absent), Keita Saito, Isamu Yamada (Already presented with award as Secretary)

Attendees were invited to come forward for group photos and video documentation, in keeping with IEEE tradition of acknowledging contributors upon the official publication of a standard.

4.4 IEEE SA in India Support

4.4.1 Opening Remarks by Gopal Tadepalli (Anna University, Chennai)

Gopal Tadepalli, representing the organizing team at Anna University, welcomed participants and introduced Sri Chandrasekharan, Regional Head of the IEEE Office in Bengaluru. He commended Sri Chandrasekharan's leadership in providing robust web infrastructure support for DSW2025, notably guiding the team's transition from IEEE VTools to ConfTool, an alternative conference management platform under contractual agreement with IEEE Bengaluru. He also acknowledged contributions from colleagues Sharif and Anushri, and expressed gratitude to Dr. Hiroshi Mano and other members of the IOFDS and DTS for approving this shift. Gopal concluded by emphasizing India's growing role in standards development and welcomed further contributions from the academic and technical community.

4.4.2 Keynote by Sri Chandrasekharan (IEEE Head Office, Bengaluru, India)

Sri Chandrasekharan, Country Head of IEEE India and Global Practice Lead for Foundational Technologies at the IEEE Standards Association (IEEE SA), delivered a comprehensive keynote on IEEE SA's evolving role in global standards development and India's growing engagement in this space.

(see d4_IEEE SA Introduction (Final)_Srichandra.pdf)

He began by introducing IEEE SA's broad mandate—not only as the home of core technical standards such as **IEEE 802.11 (Wi-Fi)** and **Ethernet**, but also as a key actor in addressing **non-functional requirements** including **trust, identity, privacy,** and **security**. These aspects, he noted, are central to IEEE's efforts to build e**nd-to-end**

trustworthy systems, aligning closely with initiatives like the **IEEE 3800 series,** which explores the **agency and monetization of data**.

He explained IEEE SA's two models of participation:

- **The Individual Method**, where each person represents themselves (used in IEEE P3800),
- **The Entity Method**, where participation is on behalf of organizations (companies, universities, etc.).

Sri Chandrasekharan highlighted several strategic programs that support the standards lifecycle:

- **Industry Connections Program:** A platform to explore and incubate emerging technologies before standardization.
- **National Standards Adoption Program:** Enables countries to formally adopt IEEE standards, with options for local adaptation.
- **Conformity Assessment Program:** Helps ensure product compliance with IEEE standards, either for regulatory or market assurance.
- **IEEE SA Open:** Facilitates open-source development that complements formal standards work.

He outlined IEEE's **governance structure**, including the **Standards Board (SASB)**, Corporate Advisory Group (CAG), and committees such as **NesCom**, **RevCom**, and **PatCom**, which oversee project authorization, document review, and patent matters. Standards are developed through **working groups,** and each standard undergoes a defined lifecycle—from **Project Authorization Request (PAR)** to balloting, publication, and eventual review after 10 years.

He also noted IEEE's focus on a wide range of e**merging technology domains**, such as **AI/ML, IoT, sustainability, healthcare, cybersecurity,** and **ethics** in technology, reflecting a shift from purely technical frameworks to those with **societal impact.**

Concluding, Sri Chandrasekharan reaffirmed IEEE's principles of **open participation, transparency,** and **global collaboration,** and encouraged stronger involvement from India and other Asian countries in shaping the future of technology standards.

Acknowledgments and Editorial Note
Isamu Yamada of the Data Society Alliance (DSA), serving as the secretariat of the International Open Forum on Data Society (IOFDS), compiled this report based on the speaker's presentations and discussions, including participants. Each speaker has made efforts to review the content. We thank all contributors for their valuable input and cooperation.