2026 Control Systems Society Strategic Plan

This document defines the Strategic Plan of the IEEE Control Systems Society (CSS), articulating the Society's vision, strategic priorities, and future directions. It provides a framework for guiding the Society's activities, fostering scientific leadership, maximizing societal impact, serving its global membership, and ensuring that CSS remains the leading international professional society for systems and control.

Vision

The IEEE Control Systems Society advances the science of feedback, dynamics, and decision-making, providing the theoretical and engineering foundations for trustworthy, resilient, and high-performance engineered systems. By advancing rigorous theory, accelerating its translation to practice, and fostering a global community of researchers and practitioners, CSS addresses the world's most pressing technological and societal challenges.

Strategic Pillars

To realize this vision, the IEEE Control Systems Society will pursue five strategic pillars that define its long-term priorities and guide the Society's activities, investments, and partnerships. These pillars provide the strategic framework for the companion CSS Operations Plan, which defines the operational initiatives that support their implementation.

Advance the Foundations of Systems and Control: Lead the development of the scientific foundations of feedback, dynamics, decision-making, and control that enable intelligent, autonomous, and safety-critical systems through rigorous advances in learning, optimization, estimation, verification, validation, assurance, and certification.

Harness Systems and Control to Address Societal-Scale Challenges: Position the systems and control community to address major societal and technological challenges, including climate resilience, sustainable energy, health, resilient infrastructure, advanced manufacturing, and intelligent mobility. Catalyze interdisciplinary collaboration and international partnerships to shape future research directions and strengthen the role of systems and control in addressing these challenges.

Accelerate Translation to Practice: Accelerate the transition of systems and control innovations into practice by strengthening partnerships with industry, government laboratories, standards organizations, and innovation ecosystems. Promote validation, benchmarking, deployment, and adoption of new technologies to maximize their economic and societal impact.

Lead Knowledge Exchange: Make CSS the indispensable technical home for the global systems and control community by providing a world-leading ecosystem for scholarly communication, technical exchange, and technical education. Continuously evolve the Society's publications, conferences, Technical Committees, Chapters, workshops, tutorials, and digital resources to educate and prepare the next generation of researchers and practitioners, thereby strengthening the vitality, impact, and global leadership of the systems and control community.

Cultivate an Engaged and Sustainable Membership: Foster a thriving global community by attracting, engaging, and retaining members across all career stages and regions. Broaden participation and representation across career stages, geographic regions, and institutional affiliations throughout the Society's membership, leadership, and professional activities worldwide. Enhance member value through mentoring, professional development, leadership opportunities, and meaningful technical and professional engagement.

Strategic Objectives and Priorities

To achieve the strategic vision outlined above, CSS will pursue the following long-term objectives through its companion Operations Plan:

- Sustain and strengthen the foundational science of systems and control, which is the intellectual core of the Society, by advancing rigorous theory and methods and by championing reproducibility and open benchmarks.
- Position the systems and control community to address societal-scale challenges through interdisciplinary collaboration, international partnerships, and research agendas that expand the impact of control.
- Strengthen industry engagement across conferences, publications, technical activities, standards, and innovation ecosystems to accelerate the translation of control technologies into practice.
- Maintain a premier, open, and modern portfolio of publications, conferences, and technical education resources, advancing open science, open access, and digital and AI-enabled learning.
- Continuously enhance the value proposition of CSS membership through mentoring, leadership development, technical engagement, and opportunities that serve members across all career stages and regions.

Strategic Planning Process

The CSS Strategic Plan is developed and maintained through the Society's Long-Range Planning Committee (LRPC), as established by the CSS Constitution and Bylaws. The LRPC regularly reviews emerging scientific, technological, and organizational opportunities and challenges, and recommends updates to the Strategic Plan to ensure that it remains aligned with the evolving needs of the systems and control community and the broader scientific, technological, and societal landscape. The Strategic Plan provides the Society's long-term direction, while its implementation is guided through the companion CSS Operations Plan, which is reviewed periodically by the LRPC, Executive Committee, and Board of Governors.

October 1st, 2026

Endorsed by ExCom on October 3rd, 2026