





Public Policy Priority Issues 115th Congress, 2nd Session (2018)

 **RESEARCH & INNOVATION** – IEEE-USA will support federal research and development (R&D) appropriations and other innovation-related legislation needed to sustain U.S. technological leadership, promote economic competitiveness, and create high-value research and engineering jobs in the United States. Priorities include:


- increasing federal investments in science and engineering R&D, including university research and education initiatives;
- advocating sound R&D policies that advance innovation in US technology industries;
- revitalizing U.S. high-tech manufacturing, including appropriate incentives for businesses engaged in R&D and manufacturing operations in the United States;
- urging appropriate changes to the U.S. export controls regime, including the deemed export rule;
- removing barriers to participation in professional society conferences by federal S&Es.

 **ARTIFICIAL INTELLIGENCE** - IEEE-USA will support coordinated federal policies that promote safety, privacy, cyber security, and intellectual property protection -- as well as assure the transparency and information necessary to allow the public to make informed decisions about the use of AI. Priorities include:


- promoting the development of a well-qualified workforce in AI-related fields to support the needs of government, industry, and academia;
- supporting the R&D needed to ensure continued U.S. competitiveness in AI;
- providing effective regulation of AI to ensure public well-being while fostering a robust AI industry; and
- facilitating public understanding of the rewards and risks of AI.

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 **ENTREPRENEURS** – IEEE-USA will promote and preserve entrepreneurial and small technology businesses by focusing on export support, small business legislation, and standards & regulation fairness. Priorities include:


- improving the financing environment for Small Medium Technology Enterprises (SMTEs) having Intellectual property (patents, etc.) as their principal collateral assets;
- increasing SMTEs direct accessibility to government procurement in the areas of technology and research;
- ensuring that (SMTE) are considered when developing standards and enforcing regulations;
- reforming the National Registered Testing Laboratory (NRTL) to support its original intent; and
- creating SMTE targeted packages supporting exports with interim finance, trade agreements, logistics and freight, etc.

 **ENERGY** - IEEE-USA will support proactive energy policies designed to serve energy users' needs in an economically and environmentally sound manner, while protecting American national security. Priorities include:

- Modernizing the electrical energy infrastructure by transforming the network into an intelligent grid and strengthening the transmission and distribution systems as needed to improve security, maintain reliability, and optimize the benefits of renewable energy sources;
- Preparing an engineering and skilled trade workforce that has the necessary knowledge and skills to design, plan, construct, operate, and maintain modern energy delivery systems;
- Diversifying energy sources in the transportation sector to increase the security of our transportation system, improve its energy efficiency, and reduce emissions;
- Promoting security as part of the critical infrastructure and intelligent grid design through implementation of technologies that are tamper-resistant and resilient to direct physical- or cyber-attacks; and
- Reducing institutional barriers to engineering solutions that involve technologies required to operate across jurisdictional and information architectural boundaries.

 **IMMIGRATION** – IEEE-USA will support public policies to ensure greater equity in the recruitment, utilization, and compensation of US and foreign-born high tech workers. Priorities include:

- increasing the availability of permanent, employment-based (EB) visas;
- streamlining the immigrant admissions process;
- facilitating the transition of foreign nationals with advanced degrees in STEM fields to Legal Permanent Resident (green card) status;
- reforming the H-1B and L temporary work visa programs; and
- expediting short-term visitor visa processing.

 **INTELLECTUAL PROPERTY** – The U.S. economy and American job growth and competitiveness depend on effective and balanced protections for intellectual property. IEEE-USA will promote intellectual property reforms that maintain the balance established in our constitution and which

equitably serve the entire cross-section of U.S. IEEE membership, including start-up companies, individual inventors, university faculty, and Fortune 500 companies. Priorities include:

- ensuring intellectual property laws and regulations support entrepreneurial efforts to develop and commercialize inventions and innovations;
- clarifying technology policy associated with software and business method patents and copyrights;
- considering alternatives to patent and copyright protection for fast moving technology; and
- encouraging U.S. Patent & Trademark Office (USPTO) operations that enhance quality and management of examination and grant functions to promote the rights of inventors and society.



ENGINEERING WORKFORCE – IEEE-USA will support public policy initiatives to foster continuing education and retraining of the engineering workforce; improve access to affordable health insurance for individuals and small businesses; and preserve tax-favored opportunities to save for retirement. Priorities include:

- proposing new continuing education incentives for technology professionals to maintain their core competencies and competitiveness;
- supporting tax and other incentives to retrain engineers and displaced, skilled high-tech workers;
- enacting legislation to enable business associations and professional societies to offer affordable health insurance plans for members and their families nationally;
- supporting changes in the tax treatment of federal health insurance and employer-based health benefits; and
- promoting improvements in K-12, vocation, and higher education to enable and encourage STEM career choices.



ICT: INTERNET, COMMUNICATIONS & OTHER NETWORKS – IEEE-USA will support public policy initiatives to provide nationwide access to affordable high-speed broadband data services, and to facilitate use of new and demanding Internet applications. Such access will stimulate innovation, spur economic activity, increase national security, and contribute to increased productivity for the nation. Priorities include:

- ensuring access to universal and affordable high-speed broadband networks;
- fostering competition in facilities, services, and content;
- fostering innovation, new applications, and new uses of the Internet; and
- promoting education and legislation fostering cybersecurity for users, enterprises, and national infrastructure.



TRANSPORTATION AND AEROSPACE – IEEE-USA will work to advance the safety, efficiency, security, and sustainability of transportation on surface, air, and space, with a view towards promoting U.S. technology leadership and competitiveness. Priorities include:

- upgrading and modernizing the national airspace system with communications, navigation, surveillance, and air traffic management automation technology;

- promoting the use of intelligent transportation systems to improve transportation safety and to optimize traffic flow to ease congestion, reduce greenhouse gas emissions, and reduce energy use;
- advancing a technology-focused national space program that balances exploration, science, national security, and international partnerships;
- advocating the development of controls, safeguards, and standards to establish cybersecurity and safety in all transportation systems, and to improve port and aviation security; and
- advancing UAV commercialization through technology policies that address autonomous control system safety, security, and efficacy.



HEALTH DATA SYSTEMS – IEEE-USA will support public policies designed to improve the quality, availability and affordability of healthcare through greater adoption of information technology, including the establishment of a National Health Information Network. Priorities include:

- ensuring interoperability and security of electronic health information systems;
- supporting community demonstration projects using electronic health records;
- improving the availability of credible information on health care alternatives, providers, and institutions through electronic media; and
- ensuring the privacy and security of personal health records to prevent intrusions, exploitation, and abuses, such as genetic discrimination and identity theft.

Other Issues of Concern

In addition to these priorities, IEEE-USA will work with other organizations and IEEE organizational units to support their government relations needs, and will seize opportunities to make contributions on other issues as they arise on subjects ranging from R&D, energy, communications, careers, intellectual property, and transportation. IEEE USA will also provide competitively selected Government Fellows to the Congress, Department of State, and USAID to give expert engineering, science, and technology advice.

FEEDBACK WELCOME

Do not hesitate to contact us and express your views about legislative or regulatory actions in either your home state legislature or Congress. Please let IEEE-USA know if there are opportunities to affect positive changes for the U.S. engineering community and industries that rely on engineers. If you have questions about these issues, please contact Erica Wissolik at e.wissolik@ieee.org.