



January 30, 2019

The Honorable Jarrett Keohokalole
Chair, Senate Technology Committee
Hawaii State Capitol, Room 203
415 South Beretania St.
Honolulu, HI 96813

Re: Electronics Manufacturers Opposition to SB 425 (Electronic Equipment Repair)

Dear Chair Keohokalole,

On behalf of the hundreds of manufacturers and businesses our organizations represent, we respectfully oppose SB 425, legislation which would mandate original equipment manufacturers (OEMs) of digital electronic equipment or a part for the equipment sold in Hawaii to provide independent repair providers with diagnostic and repair information, software, tools, and parts.

Our organizations represent a broad spectrum of manufacturers of consumer electronics, home appliances, HVACR, security equipment, medical devices, toys, lithium ion batteries, and other connected electronic products as well as companies that rely on the secure operation of these devices such as entertainment software publishers. All of these companies stand behind the quality of their products. Our members develop products and services for a wide range of commercial, government, and consumer users that are often highly regulated. Their customers depend on these products to operate safely, securely, and accurately, whether they are being used to support banking and commercial transactions, transmit and store sensitive personal data, support industrial operations, medical applications, or securely deliver entertainment and other services. As businesses, government agencies, and consumers continue to increase their reliance on connected devices to help deliver efficiency, convenience, and services, it is important to remain vigilant and focused on mitigating the risks associated with the safe and secure operation of those products.

SB 425 mandates that OEMs provision any independent repair provider in much the same way as authorized network providers, but without any protections, requirements, or restrictions, and in doing so, places consumers and their data at risk, undermines the business of Hawaii companies that are part of OEM-authorized networks, and stifles innovation by putting hard earned intellectual property in the hands of hundreds if not thousands of new entities. Further, the bills fail to account for the wide range of repair and refurbishment options currently available to Hawaii consumers from both OEM-authorized and independent repair sources as well as advancements in sustainability by electronic product manufacturers. For these reasons, we urge the Legislature against moving forward with this legislation.

SB 425 threatens consumer security and safety

One of our chief concerns with this legislation is its potential to weaken the privacy and security features of various electronic products. The security of user information on these products is of the utmost importance to consumers that rely on them. Industrial equipment, home appliances, smartphones, computers, servers, consumer electronics, medical devices, and other connected devices are at risk of hacking, and weakening of the privacy and security protections of those products will increase risks to consumers. With access to technical information, criminals can more easily circumvent security protections, harming not only the product owner but also everyone who shares their network. In an era of sophisticated cyber attacks, we should not make it easier for criminals to hack security provisions.

Consumers, businesses of all sizes, public schools, hospitals, banks, and industrial manufacturers all need reasonable assurance that those they trust to repair their connected products will do so safely, securely, and correctly. State law should not mandate that all manufacturers must provide a “how to” manual for any product and provide it to anyone who asks.

Manufacturers offer authorized repair networks to provide consumers with assurance that their products are serviced by properly trained and vetted repair professionals that have the necessary skills to safely and reliably repair electronic products. Some types of repairs can be extremely detailed, complicated, performed in someone’s home, and, in some cases, dangerous to perform for those without proper training. It is particularly important that products containing high-energy lithium ion batteries are repaired only by trained professionals who understand the hazards associated with these batteries.

Manufacturers want to ensure that their products are serviced by professionals who understand the intricacies of their products and have spent time procuring the knowledge necessary to safely repair the product and return it to the consumer without compromising those standards or undermining the safety and security of their products. Authorized repair networks not only include training requirements, but also ensure that only the correct parts and procedures will be used. Consumers can be protected by warranties or other means of recourse. The legislation provides no such protections for consumers, repair shops or manufacturers.

When an electronic product breaks, consumers have a variety of repair options, including using an OEM’s authorized repair network, which often include local repair service providers as well as mail-in, and even in-house repair options for some categories of products. Consumers may also choose to use one of many independent repair service providers; although they do so without the quality assurance provided by using a manufacturer’s authorized network provider. The point is that the free market economy already provides a wide range of consumer choice for repair with varying levels of quality, price and convenience without the mandates imposed by this legislation.

Manufacturer authorized networks of repair facilities guarantee that repairs meet OEM standards. If an OEM’s brand and warranty are to stand behind repair work and assume product liability, it is only reasonable that the repair facility demonstrates competency and reliability. Without the training and other quality assurance requirements of authorized service providers – implemented through enforceable legal contracts that ensure compliance and accountability that protect consumers – manufacturers would not be able to stand behind their work, warranties, technical support, ongoing training, and business support.

SB 425 mandates the disclosure of protected proprietary information

Manufacturers make significant investments in the development of products and services, and the protection of intellectual property is a legitimate and important aspect of sustaining the health of the vibrant and innovative technology industry. However, SB 425 puts at risk the intellectual property that manufacturers have developed.

Consumer electronics use on-board software (i.e., firmware) to help control the product. That firmware is subject to copyright under federal law, and Section 1201 of the Digital Millennium Copyright Act, a related federal law, ensures that bad actors cannot tamper with the digital rights management that copyright owners use to protect this software. The problem is that making repairs to hardware components may necessitate modifying the firmware so that the product will work again.

Importantly, however, firmware controls many other product functions, and opening it up for repair purposes exposes to potential tampering other, more sensitive functions, such as security features. Given the scope of products covered and what must be provided under the legislation – including diagnostics, tools, parts, and updates to software – it is highly likely some of that information would be proprietary. Providing unauthorized repair facilities and individuals with access to proprietary information without the contractual safeguards currently in place between OEMs and authorized service providers places OEMs, suppliers, distributor and repair networks at risk.

SB 425 fails to account for advancements in sustainability by electronic products manufacturers

These bills are partly based on an inaccurate assumption that the bill will aid in the reduction of electronic waste in the state. Hawaii already has a robust e-waste law in place and continues to engage stakeholders in potential revisions. However, according to the Rochester Institute of Technology Golisano Institute of Sustainability, in the U.S. e-waste generation peaked in 2013-2014 and is in a period of extended decline¹. This trend is corroborated by the most recent data from U.S. EPA².

Electronic products manufacturers have developed robust policies and programs to ensure that they are continuously improving the sustainability of their products for their whole lifecycle, from design, to material sourcing, product performance, reuse, and responsible end of life management. This has led to continued innovation and the use of new technologies which provide consumers improved devices while simultaneously reducing the overall amount of e-waste generated – all under the existing product repair environment. And with new technologies like OLED and additional light-weighting across the electronics industry, additional declines in e-waste generation are expected to continue during the coming decades.

Repair and reuse are important elements of electronics manufacturers sustainability efforts. Not only is repair and reuse in the OEM's best interest so that consumers can continue to use and enjoy their products, but many OEMs are returning still-useful electronic products to active service to get the maximum benefits out of the resources used to make them. Additionally, under revised "green" procurement standards, federal agencies and other purchasers will be required to purchase computers

¹ Rochester Institute of Technology Golisano Institute of Sustainability (July 2017). *Sustainable Materials Management for the Evolving Consumer Technology Ecosystem*. Accessed at: <https://www.rit.edu/gis/ssil/docs/Sustainable%20Materials%20Management%20for%20the%20Evolving%20Consumer%20Technology%20Ecosystem.pdf>

² Office of Resource Conservation Recovery, U.S. Environmental Protection Agency (December 2016). *Electronic Products Generation and Recycling in the United States, 2013 and 2014*. Accessed at https://www.epa.gov/sites/production/files/2016-12/documents/electronic_products_generation_and_recycling_2013_2014_11282016_508.pdf

that meet certain environmental performance criteria under the Electronic Product Environmental Assessment Tool (EPEAT) rating system. These existing policies and programs promote repair and reuse without the consumer safety, security, or business concerns raised by the bills.

Conclusion

Thank you for your consideration of our perspective on this complicated issue. Our members bear a significant responsibility to the businesses, governments, and individual consumers that depend on us to protect the safety and security of their electronic products, as well as the sensitive data they contain. We are committed to working with you to promote digital privacy and security, while resisting unwarranted state intervention in the marketplace with one-size-fits-all mandates that compromise consumer safety and protection. For these reasons, we oppose SB 425.

Sincerely,

Air Conditioning, Heating and Refrigeration Institute (AHRI)
Association of Home Appliance Manufacturers (AHAM)
Computing Technology Industry Association (CompTIA)
Consumer Technology Association (CTA)
CTIA – The Wireless Association
Entertainment Software Association (ESA)
Information Technology Industry Council (ITI)
Internet Coalition
National Electrical Manufacturers Association (NEMA)
NetChoice
PRBA – The Rechargeable Battery Association
Security Industry Association (SIA)
State Privacy and Security Coalition, Inc.
TechNet
Telecommunications Industry Association (TIA)
The Toy Association

cc: Members of the Senate Technology Committee