



January 22, 2020

Chairperson Erin Herbig

Chairperson Matthea Daughtry

Members, Committee on Innovation, Development, Economic Advancement and Business

Re: Electronics Manufacturers Opposition to Legislative Document No. 1977

Dear Chairperson Herbig and Chairperson Daughtry:

On behalf of the hundreds of manufacturers and businesses our organizations represent, we respectfully oppose Legislative Document No. 1977 (LD 1977), legislation which would mandate original equipment manufacturers (OEMs) of digital electronic equipment or a part of the equipment sold in Maine 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, toys, lithium ion batteries, and other connected electronic products as well as companies that rely on the secure operation of these devices. 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. 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 offer and 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.

LD 1977 mandates that OEMs treat any independent repair provider in much the same way as authorized network providers, but without any contractual protections, requirements, or restrictions, and in doing so, places consumers and their data at risk, undermines the business of Maine 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 bill fails to account for the wide range of repair and refurbishment options currently available to Maine consumers from both OEM-authorized and independent repair sources. It also does not address advancements in sustainability by electronic product manufacturers.

More than 20 state legislatures have already reviewed similar legislation. No bills have passed as states have come to the determination that legislating repair rules for manufacturers created more issues for consumers than answers.

For these reasons, we urge the Committee on Innovation, Development, Economic Advancement and Business against moving forward with this legislation.

LD 1977 harms consumer security

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, services, consumer electronics, 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 cyberattacks, 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.

The current legislation requires OEMs to provide any owner or independent repairer with “information necessary to reset a security-related electronic function with information provided to owners and independent repair facilities, or the original equipment manufacturer shall make that information obtainable by owners and independent repair facilities through the appropriate secure data release systems.”

Ultimately, a connected system of tens of billions of products presents massive opportunities while posing unprecedented risks. The health of our collective privacy and our economy are intertwined with how we approach the security of this integrated system. LD 1977 does not take into the account the new paradigm of a connected world.

LD 1977 harms consumer safety

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.

Most consumer technology products are comprised of complex electronics which require specialized training and sophisticated test instruments to repair safely. Some types of repairs can be extremely detailed, complicated and dangerous to anyone without proper training. It is particularly important that products containing high-energy lithium ion batteries are repaired only by trained professionals who understand and mitigate the hazards associated with installing, removing or replacing 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 them and return them to consumers without compromising those standards or undermining the safety and security of their products. Authorized repair networks not only include training requirements, but also but also have the technical skills and test instruments to verify that repair parts meet all necessary performance and safety specifications. 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 professional 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 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

provides a wide range of consumer choice for repair with varying levels of quality, price and convenience without mandates imposed by the legislation.

Manufacturers' authorized networks of repair facilities guarantee that repairs meet OEM performance and safety 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 and manufacturers would not be able to stand behind their work, warranties, technical support, ongoing training, and business support.

LD 1977 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, LD 1977 puts at risk the intellectual property that manufacturers have developed.

Consumer electronics' on-board software (i.e., firmware) are key to the functioning and operation of the hardware it is embedded in, and helps protect against unauthorized access to other software and applications. That software 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 require the circumvention of digital rights management and leave the software in an unprotected state – harming the copyright owners of the software.

Firmware controls many other product functions, and opening it up for repair purposes exposes other more sensitive functions, such as security features, to potential tampering. 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 the 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, distributors and repair networks at risk.

LD 1977 fails to account for advancements in sustainability by electronic product manufacturers

This bill is partly based on an inaccurate assumption that the bill will aid in the reduction of electronic waste in the state of Maine. According to the Rochester Institute of Technology Golisano Institute of Sustainability, e-waste generation in the U.S. peaked in 2013-14 and is in a period of extended decline¹. This trend is corroborated by the most recent data from the U.S. Environmental Protection Agency².

Electronic product 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 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 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.

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

LD 1977 could provide open door to frivolous litigation

LD 1977 states that any violation of the chapter constitutes a violation of the state's unfair or deceptive act or practice outlined in Title 5, chapter 10" – Maine's Unfair Trade Practices Act.

The use of the Unfair Trade Practices Act could have significant unintended consequences across the state. Simple dissatisfaction of response from a manufacturer could trigger class action suits and immense pressure to settle suits, greatly reducing the desire for innovators of all sizes – from multinationals to startups – to do business in Maine and increasing costs for Maine consumers.

Conclusion

Thank you for considering 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 that they contain. We are committed to working with you to promote digital privacy and security, while resisting unwarranted intervention in the marketplace with one-sized-fits-all mandates that compromise consumer safety and protection. For those reasons, we oppose SD 1977.

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 Electronic Manufacturers Association
NetChoice
PRBA – The Rechargeable Battery Association
Security Industry Association (SIA)
Security Innovation Center
State Privacy and Security Coalition, Inc.
TechNet
Telecommunications Industry Association (TIA)
The Toy Association

CC: Members, Committee on Innovation, Development, Economic Advancement and Business