

Right to Repair Inquiry Productivity Commission Locked Bag 2 Collins Street East Melbourne Vic 8003

19 February 2021

Dear Commissioners

Thank you for the opportunity to make a submission in regards to the Commission's Right to Review Inquiry, following the release of the Issues Paper on 7 December 2020. We thank the Commission for the extension of one month granted to the AIIA in December.

A table of contents is provided for your reference below:

Introduction	2
Definition needed for 'repair'	2
Information Request #1	3
2. Barriers to Repair	4
Information Request #2	6
Consumer Guarantees and other consumer rights under the ACL	8
Information Request #3	9
Competition Issues in Repair Markets	10
Information Request #4	12
5. Intellectual Property Protections	14
Information Request #5	15
6. "Planned" product obsolescence	17
Information Request #6	18
7. Repair Issues for e-waste	20
Information Request #7	21
8. Possible policy options	22
Information Request #8	23

Introduction

The AIIA is grateful for the opportunity to provide input to the Productivity Commission on the Commission's "Right to Repair" Issues Paper, dated December 2020. This is an important issue for the AIIA, and our members have been actively participating in issues related to the matters raised in this paper for quite some time now. A fair, open, and highly competitive marketplace is of utmost importance to the AIIA and our industry, and for Australia's national interests as well. Such competition must occur on a level playing field for all suppliers so that it doesn't create unfairness in the provision of goods and services and so that it rewards the efforts of inventors and manufacturers and service providers in a fair and appropriate manner that is not skewed by some competitors, or even some consumers, taking unfair advantage at the suppliers' expense.

Consumers not only have rights under laws; they are also the lifeblood of businesses who depend on their ongoing goodwill to continue to do business now and into the future.

Suppliers who perform best are those who provide desired, featured solutions for their consumers' needs at value and price points that satisfy both the supplier and consumers best, and who provide ethical, competent, and friendly ongoing support for their products well beyond the sale.

In delivering products and services for consumers' needs, suppliers must also be sensitive to environmental, safety and legal issues under which they conduct business. There are many legal protections in place for the consumers in the provision of products and services, but also there are obligations and market protection laws covering intellectual property, environment, safety, and fitness for purpose and covering the ways in which products are developed, sold, and serviced.

The following sections outline AIIA's views on the matters raised in the issues paper and we trust that they are well-received by the Commission in the constructive spirit in which they are intended. We will be happy to clarify any matters that you may wish to further discuss.

Definition needed for 'repair'

Repair may mean different things to different people. Since the issues paper is talking about "sophisticated technology" perhaps the definitions in the IEV¹ (International Electropedia Vocabulary) should be used (quoted below):

IEV ref 192-06-14

Repair: direct action taken to effect restoration

Note 1 to entry: Repair includes fault localization (192-06-19), fault diagnosis (192-06-20); fault correction (192-06-21); and function checkout (192-06-22).

• **fault localization**: action to identify the faulty sub item at the appropriate indenture level for maintenance

¹ See http://www.electropedia.org/iev/iev.nsf/display?openform&ievref=192-06-14

- fault diagnosis: action to identify and characterize the fault
 Note 1 to entry: Fault diagnosis may also localize the fault and/or indicate its cause.
- **fault correction**: action to correct the fault, after fault localization
- **function checkout**: maintenance action intended to verify that the corrective action taken has been successful, without inducing new faults

Our experience in the ICT industry is that a repair is not complete unless the faulty product is restored to its initial factory-functional conditions. A problem is that ICT products are usually designed to be upgradeable (hardware, firmware, software), reconfigurable, and store user data. Once the equipment leaves the control of the factory-to-user supply chain, there is no way to ensure the original specifications are met when a product has been modified in any way from its factory conditions. While a right to repair might involve the right to have the equipment restored to its original functionality, it is not possible for manufacturers or suppliers to restore after-market third-party modifications and user data which might be lost in the course of repair, for example replacing memory or storage devices, or restoring non-original firmware and so on. Further, repaired equipment must also continue to be safe and meet regulatory requirements for electromagnetic compatibility and telecommunications regulations as well. Repairers should also have sufficient competencies to avoid risk of harm to their service personnel and avoid unnecessary inflated repair costs associated with misdiagnosis of fault conditions.

Repair does not include upgrades and modifications which give the equipment additional or altered functionality that it did not have when it left the factory. Upgrades and modifications are often installed by the repair industry without involvement or authorisation of the OEM. In this case the Original Equipment Manufacturer (**OEM**) should not have obligations to guarantee or repair the upgrades and modifications that they did not provide themselves, or consequential faults introduced by such upgrades or modifications.

The following principles should apply:

- Consumer products must be repaired by competent and professional repair technicians;
- Repair mandates must not unduly restrict technology innovation;
- Brand owners must be absolved of liabilities when a product is repaired by independent repair entity.

Consumers have statutory Consumer Guarantees and rights under Australian Consumer Law (ACL)²:

Generally, if the problem is minor, the seller can choose whether to remedy the problem with a replacement, repair or refund. If you choose to repair and it takes too long, the consumer can get someone else to fix the problem and ask you to pay reasonable costs, or reject the good and get a full refund or replacement.

² See https://www.accc.gov.au/business/treating-customers-fairly/consumers-rights-obligations

If the problem is major or cannot be fixed, the consumer can choose to:

- reject the goods and obtain a full refund or replacement, or
- keep the goods and seek compensation for the reduction in value of the goods.

Information request #1

A right to repair should be confined to a right to have suitably competent persons restore equipment to the original functional and safety conditions that it was shipped from by the factory, excluding third-party and user modifications and data of any kind. Outside of warranty, all costs of the repair are to be borne by the consumer, even if the cost of repair exceeds the purchase or depreciated value of the product or replacement product. If an estimate of repair costs prior to repair are not accepted by the consumer, then any obligation to repair is extinguished. The right to repair should not be confused with ACL consumer guarantees or suppliers' warranty conditions, as repairs are commonly performed outside of these. It should not override the supplier's right to replace or refund the goods subject to guarantees at their discretion as indicated in the ACL. We suggest that the Commission could focus on the following:

- identifying and addressing any gaps with the most commonly repaired items;
- recognising that there are already several leading third-party parts suppliers and repair entities providing this service and the impact to their business model;
- the availability of long base warranties and extended warranty that manufacturers offer.

2. Barriers to repair

Manufacturers of the products and importers are obligated under the ACL Consumer Guarantees to provide spares and repair facilities:

"Manufacturers or importers guarantee they will take reasonable steps to provide spare parts and repair facilities (a place that can fix the consumer's goods), for a reasonable time after purchase. This applies even if the consumer did not purchase the goods directly from the manufacturer or importer."

In the above, "a reasonable time" is undefined, but should be commensurate with the value of the goods, and the manufacturing and marketing and typical usage life cycle of the goods. Consumer ICT products are manufactured to growing consumer needs of faster and lighter, and built with latest technology, thus replacing the previous generation of product due to technology innovations, market demand and competitive pressures. While sufficient stock for anticipated spare parts over time are estimated and planned, it is not foreseeable what the actual demand over time will be until stocks of certain parts are exhausted begin to show usage trends. That might happen after manufacturing for that product or part has

³ Consumer guarantees - a guide for businesses and legal practitioners https://www.accc.gov.au/publications/consumer-guarantees-a-guide-for-businesses-and-legal-practitioners

discontinued, making it more difficult to obtain a specialised part for a particular model. In some cases, spare parts are manufactured at the same time as the whole unit in a single very large-scale production run. Activating this kind of manufacture again is typically impractical and costly.

The question is: is it reasonable to keep spare parts for, say ten years, for a product that is only sold for a duration which depends upon the needs of the consumer that continues to evolve at rapid pace? The way consumers are using technology products has changed, impacting the projected usage-life expectancy, given frequent technology changes over time and users' statistical propensity to replace their products often. Keeping excess spares stock is a significant cost to business, which adds to the repair cost, and is a waste of environmental manufacturing and disposal resources. Manufacturers around the world are trying to reduce their scope 1, scope 2 and scope 3 emissions and keeping excess inventory in anticipation of a repair demand is counterproductive.

Access to spare parts should be on reasonable commercial terms, taking into account issues with managing vast supply chain base, logistics, pricing, and inventory. Some of the spare parts are generic such as SSD (solid state storage drive), memory, accessories etc. It is best that such parts are consolidated and serviced by effective supply chains that leverage economies of scale.

That there must be spares and a place to repair the goods is an obligation on the manufacturer required by the ACL, not a monopoly. For convenience, manufacturers often outsource this obligation to third-party repairers which have been assessed and trained and have the tooling and quality systems to consistently perform repairs competently and safely to the required standards. These are referred to as "authorised repairers". If another repairer wishes to attempt repairs without the benefit of becoming an accredited authorised repairer, it's at their own risk, as the manufacturer has no input to their competency or processes other than to supply spare parts to them at fair market price. The problem is that repairs done badly by unqualified repairers give the manufacturer a bad name and may even be dangerous to the consumer or cause interference with other equipment. Therefore, manufacturers prefer the authorised repairer route as their first choice, but it does not prevent consumers from going elsewhere.

Authorised repairers have to undergo thorough qualification processes where they agree to the OEM's business terms e.g. Quality of repair, Customer SLA and Customer Satisfaction Score and any open audits, but also around responsible business practices as it relates to their people and process, and any waste is accounted for and managed responsibly.

Repairs performed under guarantee or warranty are done at the OEM supplier's cost, and they should be entitled to use repair facilities of their own choice, which would typically be one of their authorised repair centres. Repairs performed during or after the warranty period by unauthorised repairers are not under the control of the OEM or supplier and therefore the OEM or supplier cannot be held responsible for the outcome.

Repairs involving embedded software or user-added applications and data are a particular barrier to repair as the repair may involve the loss of applications and data, and firmware may have to be reset to factory settings in order to make the hardware work correctly.

Sometimes consumers replace original firmware with custom firmware from untrusted sources, or unauthorised repairers use non-original parts which might not conform with the intended specifications, and if the equipment misbehaves (for example mobile phone receiver characteristics may change so the phone won't connect to a telecommunications network, or it interferes with radio communications services) then the original suppliers can't be expected to repair the modified device.

Firmware update availability for an extended period after withdrawal from marketing is not ideal for longer periods, such as 8 years as considered in Europe, because the most recent available security update is often made when the last product of a model is withdrawn from the market. For example, any server or storage product that uses old firmware and security updates many years after the product was withdrawn from marketing may leave their machines potentially open to newly-developed security vulnerabilities. These vulnerabilities not only expose that product to risk but also all network-connected products and services that are reachable by that product, which can cascade through to other products further upstream and downstream. Extending availability of old firmware and security updates well beyond the withdrawal date may place the product, personal data, and the consumer at risk.

Making parts available for extended periods for a product that has been withdrawn from market will present ageing self-life issues. For example, specialised batteries stored for long periods as spare parts will self-discharge and degrade over time and may not be able to be recharged or the efficiency is reduced so they cannot perform as well as a newly-manufactured part, and they cannot be remanufactured without retooling and major additional expenses. This is an expense to the OEM.

The degree to which faults or damage occur is also a factor in the repairability equation. It is not uncommon for the repair costs to exceed the value of a product, especially for rapidly depreciating older products. A smart phone, for example, sold for over a \$1500 retail when new might only be worth a couple of hundred dollars second hand after a year or so, or even less, so this drastically impacts on the value proposition for expensive repairs, as the cost for the replacement parts still needs to be covered.

Information request #2a

The AIIA recommends the Commission focus on high value/long natural life cycle products that are commonly repaired. There is a significant cost to maintaining spares and service instructions, tools and skills, which would not be of benefit in the case of lower value short lifecycle goods. Business-to-business (**B2B**) products should be excluded from the right to repair when they have service contracts and extended warranty.

The Commission seems to assume that access to repair is an issue for all products. It certainly is not. Customer service, including repair, is critical to customer satisfaction and therefore customer retention. High failure rates are indicative of an approach that prioritizes immediate sales rather than customer satisfaction more broadly.

Customer service, including repair, is also incredibly expensive. For manufacturers focused on customer satisfaction, the only way they can provide this necessary and expensive service is through high quality (low failure rate). Policy measures aimed at ensuring product repair are superfluous in this context. Brands with a high regard for customer service, seek to manufacture durable, quality products with high customer satisfaction, with the explicit

intent of reducing the need for repair.

Also, many products are very complex (in respect of hardware). Repair of these products necessarily requires training both to accomplish the repair and to avoid very real safety issues. The Commission should not assume that any professional repairer can repair every product.

Information request #2b

Embedded firmware makes many products easier to service as they can remotely correct unexpected product operation in a lot of cases. Hardware failure is always costly to repair and, for out-of-warranty products, should be considered against the depreciated value of the affected product.

For many products, primary customers already have access to download latest device drivers, BIOS, and firmware etc., which enables the system to continue to operate at its best. For vast array of products, customers can also run diagnostic software and identify for themselves any potential threat or issue to proactively get support.

The manufacturer's primary goal is to ensure that the product continues to perform the function for which it was originally designed. As such durability and reliability of product is of paramount importance. It however maybe counter to some of the repair principles, e.g., to make product dust proof, waterproof and so on, and to improve the ASHRAE class of the enterprise systems, designers have to make choices that will enable it be certified to such standards.

Many factors affect design decisions. We are required to consider and balance many competing factors that consumers value, including device functionality, product safety, security, interoperability, and quality. We encourage the Commission to consider the complexity of product design decisions and to assess potential trade-offs.

The electronic device market is highly competitive, and consumers choose devices that meet their needs and preferences. Repairability is an important factor for some consumers and there are many devices in the market that are readily repairable.

A wide variety of design choices that are made to meet consumer demands and market requirements may incidentally affect device repairability, but such design features serve other important purposes and should not be evaluated solely as "repair restrictions" in isolation from other design-related demands.

Many design decisions are made to enhance device and platform security and protection of user data. These decisions also help to protect intellectual property and combat illegal software piracy. Device designs also promote fairness in gaming, for example, by preventing consoles from being augmented with additional computational power or cheat bypasses.

A high failure rate implies a low degree of durability. Minimal or very short warranty periods can be another indicator of low quality/durability.

Ongoing support for upgrading firmware, software, and operating systems are not repair

issues since it is not restoring the product functionality but enhancing it with additional features.

Information request #2c

The information and communications technology (ICT) industry offers a vast range or products from microscopic wireless tags to near-building-sized mainframe computers and telecommunications exchanges. Products sold for non-consumer use should be clearly exempt, as commercial arrangements are usually in place to service those products. Low value goods and short lifecycle goods should also be exempt.

The AIIA requests the Productivity Commission to also investigate excluding from product repair mandates requirements that may be detrimental to product safety and consumer safety.

3. Consumer Guarantees and other consumer rights under the Australian Consumer Law (ACL)

According to the ACCC, the ACL also says:

A manufacturer or importer does not have to meet the guarantee on repairs and spare parts if they advised the consumer in writing, at or before the time of purchase, that repair facilities and spare parts would not be available at all or after a specified time.⁴

This is very rarely relied upon. It is unusual for a consumer to be advised before or at the time of purchase, particularly for expensive goods, that spare parts and repair facilities would be unavailable at all or from a certain time. This may be used in cases of the uneconomic nature of repairing the device, or in the case of selling aged final product stock at a special price to clear old stock to make way for new, but it would significantly devalue the product in any case which may be seen in deeply discounting the retail price. And it does not negate the supplier's responsibility to replace or refund a faulty device under the consumer guarantee.

Manufacturers have robust warranty programs, and all spare parts are typically kept meeting these warranty obligations. When a product is beyond repair the manufacturer provides exchanges and other support to customers, including return within the warranty window, free warranty with original purchase, or optional extended care and protection plans etc.

Faulty devices that are replaced are usually recovered for recycling purposes by the supplier under their obligations under product stewardship schemes such as the national television and computer recycle scheme (NTCRS, which covers televisions, computers, printers, and computer products), where the devices are dismantled into useful parts and materials that may be reprocessed and used in other goods. There are also electronics recycling collection facilities in many if not most local government areas. The alternative to such advice is to completely withdraw the product from sale; that would involve dumping and/or recycling

-

⁴ Ibid.

products that have never been sold, thus further wasting usable resources. Suppliers do not manufacture equipment for the purposes of recycling them without other use.

While equipment damage caused by consumers from accident or abnormal use is not covered by warranty, this is outside the control of the manufacturer, that does not intrinsically prevent the device from being repaired at the user's own cost. For example, someone sitting on their phone in the back pocket and cracking the screen. In these cases, consumers are free to obtain quotes from the supplier or other repairers of their own choice.

It is acknowledged that under the ACL it is up to the consumer to become aware of their rights and learn to exercise or enforce them. Creating a specific "right to repair" does not intrinsically resolve that problem. It is just another right the consumer would need to learn to exercise and would add to confusion between rights to repair versus rights under warranty. In general, consumers are advised of their warranties for significant products in writing, and the ACL, according to the ACCC requires:

If a supplier or manufacturer chooses to provide a warranty against defects to consumers then the warranty document provided must comply with specific ACL requirements.

Any material with writing on it could evidence a warranty against defects, for example, wording on the packaging or on a label. A warranty against defects may also be contained in a document inside the product's packaging.⁵

For goods imported directly by consumers, there is usually no contract in Australia and the transaction is governed by laws applicable in the offshore jurisdiction where the transaction occurs. In this case the consumer may be purchasing a product where there are no repair facilities or parts available in Australia for that device and no applicable consumer guarantees, even if a brand name they import is represented by a supplier in Australia. In this case it would be unreasonable to expect the overseas supplier to make parts and repairs available here and would be unreasonable to expect the local brand representative to have repair arrangements in place for products they do not offer for sale in Australia. The cost to the consumer for transporting the goods to and from the overseas supplier for repair would be significant, and devices with lithium batteries are not accepted from consumers by Australia Post for international or air shipping in any case because of their transport hazard.

Information request #3a

Australian Consumer Law (ACL) does provide adequate access to repair remedies. In other industries, like the motor vehicle industry, the warranty terms of only using the dealer for these types of repairs could be limiting the access for some consumers, particularly in relation to optional "extended" warranties. There is little commercially preventing repairing ICT equipment by the supplier of choice outside of warranty. Even within warranty, the ACL gives the consumer the right to have the product repaired by someone of their choice and bill it to the supplier if the supplier is unable to effect repair or replacement or refund in a timely

٠

⁵ Ibid.

manner.

Access to proprietary design information about a product however is usually not needed to cover repair processes for the product. In many if not most cases the detailed design data is held in commercial confidence to prevent intellectual property theft by competitors. Information about the fault diagnosis process and service tools and the list of replacement parts may be made available in maintenance manuals to third parties either publicly, or on request under fair and equitable terms. The granularity of replacement parts should not be defined either, as most economic repairs can be effected by the replacement of populated electronic modules of several to many components.

Information request #3b

The consumer guarantee does provide access to repair services and parts. The AIIA does not have knowledge as to whether the opt-out clause is being widely used.

Information request #3c

Broader societal costs such as environmental impact of used or unrepaired equipment is currently handled through product stewardship programs around the country. Requiring suppliers to maintain large stocks of spare parts for many years which may never be used is also a large cost to the supplier and needs to be balanced against the environmental impact of energy and resources used to make and keep them.

Information request #3d

A majority of consumers are generally aware of their rights to a product that's fit for purpose, and information about the Australian Consumer Guarantee is provided with the warranty for products for their information in any case, especially for more elaborate or expensive products. More point-of-sale information is not required. Consumers who are a part of our elderly community and consumers who do not have English as first language may be less aware of the ACL consumer guarantees. Better education by relevant government departments to help these consumers understand these rights might be beneficial.

4. Competition issues in repair markets

The issues paper identifies that:

"OEMs are typically the major (or in some cases, the only) supplier of spare parts and tools to the repair market."

While the OEM does control the design, form and function of the end-use product, many individual parts within the product may be acquired from third party suppliers. Importers usually have little to no input on the overseas product design and manufacture, and rely on service spares and materials being made available to them through commercial arrangements where possible. If a repairer needs parts to repair a machine, they will usually source the parts from the OEM or their parts distribution channels, as they are usually required to maintain a spare parts inventory, which doesn't necessarily have to be held within Australia. However, excluding unique parts which are purpose-built for the OEM, the

repairer can also source some replacement parts used in the product for commercial off-theshelf (COTS) components and subsystems used in the end-use product which the repairer may be able to source independently from the OEM, thus providing some competition in the spare parts supply systems. The same applies to tools.

There are several multi-national parts distributors whose core business is to maintain service parts inventory and make it commercially available online. These vendors often source parts directly from parts suppliers.

There may be some specialised tools that are only available from the OEM because the OEM designed and constructed and often programs them. Since specialised tools are manufactured in far fewer numbers than the consumer product they are designated for, their cost is substantially more, sometimes prohibitively expensive for smaller repairers. Specialised tools and instructions are not required by the ACL, but if sold, may themselves be subject to ACL statutory warranties and all the repair implications for the tools themselves that may be involved.

Goods with embedded firmware or safety functions are also of particular concern. For example, replacement lithium secondary batteries for laptop computers often feature safety monitoring and protection systems built into the battery to ensure the battery can be used safely. Other problems the ICT industry has with the generic battery industry is functional copies or counterfeit devices that don't contain adequate safety design, but otherwise may look and feel similar enough to the original part to the third-party repairer or user. So, while it might seem that there is competition in generic batteries for, say a laptop computer, the generic parts may introduce serious safety risks (fire, explosion, burns, smoke etc). The battery safety standards cannot be used in isolation from the equipment safety standard. They must work together.

Counterfeit devices (not just in batteries) are nearly always substandard and noncompliant and result from intellectual property leakage via such things as service information and reverse engineering. Predatory pricing is often used by the counterfeit suppliers to make the consumers think they have a bargain. They are intentionally designed to mislead consumers into believing their product is an OEM original, even to the point of including labelling and packaging as if it were an OEM part. It is difficult for the consumer to tell the difference visually, so they return these devices to the OEM's repair centres for service, but it's not possible for the OEM to perform repairs or offer warranties against these devices. Tools such as copyright terms which prohibit reverse engineering and trademark protections are key tools providing means by which OEMs can act against identified offending parties. It can be difficult to identify the counterfeit manufacturer or supplier in order to take action against them to cease and desist.

There are many dangers associated with the poor manufacturing practices used by aftermarket suppliers. For example, some of the most dangerous situations observed occur when the vent holes of the battery cells are blocked. This situation is particularly dangerous because the vent holes allow excess gas to escape if thermal runaway occurs. If the gases are trapped, excess pressure could cause an explosion. The average consumer will not know if a counterfeit battery was placed in the system.

There are many other non-conformance problems with generic manufacturers as well. Some have printed specifications and labelling that describe the part's safety and performance parameters, but the part does not meet those conditions. Safety sensitive devices like power supplies might have inadequate electrical insulation or fire protection properties or might simply not be sufficiently regulated to prevent damage to or properly operate the equipment. They also might not be approved by a third-party safety test laboratory and an Australian government authority. A few suppliers have produced fake safety approval certificates and safety labels. Some generic power supplies have caused electromagnetic interference to nearby broadcast radio services. And clearly the OEM cannot be expected to be responsible for a product which has malfunctioned or burned out because of the use of generic parts. Generic manufacturers must be required to produce parts which meet the same quality and safety specifications as the OEM part as it is used in the product, and repairers should be obligated to ensure the correct selection of parts for repair.

OEM ICT products go through a rigorous and extended process of quality control, compliance engineering, certification, and government authority approvals and approval labelling. Replacing compliance-sensitive parts during service with generic parts may very well invalidate the compliance certifications that are required by government authorities, such as safety, radio emissions, telecommunications, electromagnetic compatibility, and energy efficiency.

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 have the quality systems, 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.

Information request #4a

The AIIA does not have detailed data on the size and nature of the repair markets in Australia. We agree that this data will be helpful in getting laser focus on where there might be gaps. It would be also helpful to learn what are the common repairs being done (product types, type of repair etc.).

Information request #4b

There are major quality issues between trained and untrained repairers. If the repairers are quality-systems accredited, and are suitably skilled, trained, equipped, and use non-generic original parts, similar repair outcomes to the OEM's authorised repairers may be possible.

Safety and quality become a significant concern with untrained repairers, if or when they do not follow the safety protocols a vendor or manufacturer has in place. The other consideration is, if an incident occurs, who owns the liability with an unauthorized repairer? Organizations will have a concern around protecting brand reputation, if any person is

repairing products that are not trained and consumers receive a below average level of service, the consumer could relate this experience to the OEM's brand.

If a repair by an untrained or unauthorised repairer causes another fault with the product, it is often up to the manufacturer to prove that the fault was due to the repairer's work and not due to a fault with the product. This can sometimes be difficult and result in the manufacturer being responsible for the poor workmanship of the untrained repairer.

Also, there should be a first right of refusal for the OEM to inspect the unit and do the repair under warranty if the costs of repair are commensurate. Sometimes consumers go directly to a third-party unauthorised repairer without even asking the OEM to first do the repair, and then try to pass these costs on to the OEM under warranty.

Information request #4c

Contracts between OEMs and authorised repairers are commercial business arrangements which specify terms, conditions, obligations, and benefits for each party. Open and competitive processes for authorised repairers are not designed to exclude third party repairers, and authorized repair partners are not excluded from working with the OEM's competitors.

Repair contracts are designed to repair consumer products to a sufficient level or operation and quality and safety as the consumer expects. Authorised repairers are comprehensively evaluated by the OEM to ensure they can perform as promised, and this is a cost to the OEM and repairer. Contract terms between the parties should not exclude offering similar contracts under reasonably similar conditions to any of the authorised repairer's competitors. The OEM should not be obligated to offer a repair contract to a third-party repairer which cannot meet essential quality, safety, and performance requirements.

OEMs also do have contractual protections, requirements, or restrictions, to ensure consumers and their data is not at risk.

Information request #4d

The AIIA has no evidence of OEMs or their repairers creating barriers to competition in the repair market for ICT products.

Manufacturers' authorised 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 authorised service providers, manufacturers would not be able to stand behind their work, warranties, technical support, ongoing training, and business support.

Information request #4e

Competition and technology innovation in the ICT market is very intense, with complex products being marketed for only a few months at a time before being replaced with newer technology. This is driven by technology development, competition, and consumer demand. The provision of repair facilities in such a rapidly changing market lags the product release by some weeks as manufacturing ramps up to build new product for sale rather than spare

parts per se. There is also a repair lag due to the learning curve for complex technologies. Spare parts usually follow at a lag from product launch once sufficient initial demand for new release product has been satisfied. During this lag, faulty products are usually refunded or replaced. Once spare parts are available then repair facilities can tool and train and stock up the repair industry.

Provided spare parts and service instructions (for more complex products) are made available on RAND terms to competent repairers, there should be no problems with competition in the repair market.

Information request #4f

The AIIA is unaware of anticompetitive conduct in the repair market, however believes that existing trades practices provisions in national and state laws exist to discourage and redress any such attempted conduct.

Information request #4g

Existing competition in the repair market does result in cost-effective repairs, but not necessarily quality repairs. Cost-effectiveness is influenced by many factors, only one of which is parts cost, even for which there is competition in the provision COTS parts. Generic parts that do not meet the OEM's specifications are a particular problem. Third-party repairers using unapproved cheap generic parts to reduce repair costs may result in consumer safety and other hazardous outcomes.

5. Intellectual Property Protections

Trademarks, patents and copyright are vital parts of the intellectual property assets of a company and are not available to be copied without permission or attribution. Copyright exists in the Productivity Commission's Right to Repair issues paper, and the Australian Government owns the Australian coat of arms logo on the front cover of the issues paper. In this case, the issues paper has been "released" to the public for comment without charge (this is implied, not explicitly stated), however nobody is permitted to use the document contents or make derivative works without proper attribution to the owner, under copyright law. The Australian Government Coat of Arms logo cannot be used in other documentation by any organisation which is not an Australian Government body or authorised by them.

OEMs invest heavily in their product designs, information, service documentation, software, patents, and trademarks, expecting a return on their investments through product and services sales and licensing arrangements. They are obligated to protect the use of their registered trademarks as well. Registered trademarks include not only the company logo but also the naming of the products and services they produce, and costs money to obtain, which needs a return on the investment to justify the cost. These protections are intended to prevent misuse of intellectual property by competitors who may wish to obtain benefit of the OEM's investment without paying their dues.

Consider application software theft, movie theft, music theft as examples where it is well-recognised that inappropriate sharing without permission is detrimental to a company's profitability. The same applies to service information and embedded software in products. The OEM has invested heavily in making this work right, and usually licenses the material to be used in fair ways, often with the payment of a fee, sometimes without fee payment but a

license condition to prevent misuse, such as reverse engineering and manufacturing cloned or competing copies of the product using the knowledge unfairly gained.

If a supplier makes service information available to an authorised repairer, it should also make it available on RAND terms to other repairers. Some suppliers do make their service information available free of charge to the general public, or to genuine equipment owners (e.g., serial number required for access). But that does not automatically authorise third parties to redistribute their documentation and software to other parties. To protect copyright, an OEM is obligated to act on significant unauthorised distribution, use, and copying. Otherwise, the copyright is meaningless.

Firmware and instructions may be changed over time as experience with the product and engineering changes develop over time. There is no way to advise the product owners of the changes unless they come to the OEM or supplier. Service information or firmware that has been distributed or copied without authorisation may contain errors or omissions that remain uncorrected if repairers use unauthorised sources for their data, and that compromises the repairability of the products going forward. It also might not match the hardware engineering changes that have been made in later-manufactured equipment of the same type.

Firmware that has been distributed through unauthorised channels may have been interfered with by the inclusion of malware, spyware, back doors, adware, or keyloggers etc without the equipment user's or repairer's knowledge, which is a huge security and functional risk. It is only by sourcing the firmware directly from the OEM or supplier that users and repairers may be sure the firmware is of merchantable quality and has proper consumer guarantees.

Sometimes firmware intended for other models of equipment are used in the third-party repair or updating of equipment to activate features that may be illegal to operate in some economies. For example, the Australian spectrum plan is different to other countries. Firmware intended for Australia will activate that set of frequencies and emission levels which are permissible in Australia under regulations administered by the Australian Communications and Media Authority (ACMA). Firmware downloaded for similar products of other countries not sold in Australia or product variants might activate non-conforming spectrum limits that are illegal for that purpose in Australia. Similar situations apply to telecommunications customer equipment, which is also regulated through the ACMA. For example, the Australian mandatory requirements for access to emergency service calls from locked mobile handsets. For these reasons, firmware and download sites are often geographically locked or equipment serial number locked to prevent the use of the wrong firmware in local products.

Information request #5a

Present IP laws give suppliers control over the content, release and distribution of their service and software materials in a way that ensures the ownership is properly attributed and correct up to date information is maintained, and only services legally permissible in the country are activated.

Firmware controls many product functions. Opening up firmware for repair purposes exposes other more sensitive functions to potential tampering, such as security features. Given the scope of products covered by the ICT industry and the expectation to provide 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. Competition in the repair market by unqualified, poor quality, and ill-equipped repair providers should not compromise the repair outcomes for OEMs and consumers.

Additionally, many devices include proprietary security and data protection mechanisms to protect not only the intellectual property of the manufacturers, but also the privacy and security of their customers. In other hardware (like games consoles) these mechanisms also protect the fairness of games and competition for consumers. Providing unauthorised access to diagnostic tools or modification capabilities could invalidate these protection mechanisms.

Information request #5b

Consumers have the right to repair or replacement or refund under the ACL. The right to repair implies the right to restore the product to its factory-shipped functional condition, which would include all software, embedded or otherwise, and publications shipped with the product or referenced with the product on the supplier's web site. Third party repairers should be able to access this same information as the consumer, but to dive deeper into the repair procedures might involve paying the OEM for the right to access additional, less-public material. If the consumer or repairer wants to upgrade the product beyond its initial specifications, they should pay for the upgrade where a fee is charged and not expect automatic rights unless the supplier offered those rights at the time of sale. Upgrades, refurbishment, and modifications are not repairs.

Information request #5c

The ICT industry has many third-party repairers available at the present time and does not appear to be impeded by IP protections to repair products. An example was given in Box 8 of the issues paper concerning a laptop supplier who did not make service information available to the public. Laptops are virtually commodity items now and share many common components and systems. General competency in laptop repairing should have sufficiently prepared the repairer for whatever they might find inside such an undocumented machine. Service instructions might have been helpful at the periphery, but probably not essential for an experienced service person. Making service information available on a RAND basis (not necessarily free of charge), where it exists, to all repairers who need it would go some way to dispelling this perceived concern.

Information request #5d

Firmware (embedded software) contains intellectual property which always have legal protections. For many products access to firmware is not strictly necessary to conduct a repair. Incorrect and unauthorised replacement of firmware in products has often led to non-conforming products as well as "bricking" devices ("bricking" is making the product permanently functionally inert). The possible use of tampered or incorrect firmware introduces significant security, functional, and privacy risks. If firmware is supplied to any repairer for repair purposes, it should be available to all repairers under RAND terms.

Equipment with communications functions that are open to alteration by malicious third parties could open a backdoor for illegal interception by foreign countries and industrial espionage. It would have a harmful impact to Australia's communications network national security, as well as raise many consumer privacy issues and seriously erode confidence in the security of online e-commerce systems.

6. "Planned" product obsolescence

Product obsolescence largely occurs naturally and organically through the ongoing evolution of technology, underlying networks, product competition, user requirements, societal changes, service provision, standards development, and regulatory changes.

A few short years ago television and broadcast radio were the main entertainment media delivery platforms. Today it is the internet, driven by the development of the NBN and smart TVs and smarter computers, phones, and tablets. Before the NBN, Australians were largely limited to a few tens of megabits per second, with limited data caps. The NBN raised that to 100 Mbps initially and now has several times higher than that speed available to the public with essentially no data caps. This assisted the development of streaming media entertainment services that are now becoming mainstream replacements for broadcast television. However, the NBN also made a large range of wireline-connected products obsolete, such as xDSL modems, as the telephone network of old was converted to the NBN.

Recently the COVID-19 pandemic hit Australia and most other places on earth (even Antarctica). This has driven a massive surge in demand for high-speed reliable internet access, mobile, home office, remote access, and web-meeting tools, as well as furthering demand in streaming content and online entertainment services.

Fax machines are now largely obsolescent due to the widespread adoption of emailing or web host sharing of scanned images. The mobile phone network has gone through a range of updates, from GSM and AMPS, to 2G networks that have all now been discontinued in Australia, to 3G which is now obsolescent, 4G and most recently 5G mobile networks which have each introduced substantial benefits to the user community. Premium smart phones today are built to be compatible with 5G, 4G, and 3G networks as well as a range of WiFi networks that have also been rolled out over the time. WiFi 6 is now replacing older WiFi systems and WiFi 6 devices are often backwards compatible with earlier WiFi variants and security settings.

This is the opposite of planned obsolescence. It is the planned future-proofing of devices, so they not only work with today's systems but also work with yesterday's and tomorrow's systems. And these are just some of the technology drivers for organic product obsolescence.

Adding to this is the explosion of the development of the Internet of Things (IoT), permitting home automation or smart homes at an affordability level that was not previously possible. This area is so new that new devices are under development all the time and standards are still trying to catch up with the technology. When the standards catch up, product development will migrate more towards standards compliance rather than proprietary specifications, thus organically obsoleting older equipment.

If consumers have a low budget, they can purchase lower performance or lower quality devices. There is a market for that. However, the cost-effectiveness of the repairability for such devices may be questionable. Well-made devices that will withstand years of use and abuse will always cost a premium. Products should be repairable if it makes economic sense to do so (cost vs. value minus depreciation). Suppliers' reputations are on the line with consumers and regulators, and there is a great value in the good will associated with successful brands, which suppliers want to live up to. There can be a large variation in the quality and functionality of similarly appearing devices and this is reflected in the price point. A \$400 phone can look very similar to a \$2000 phone, but this does not mean they can be expected to be functionally identical.

Regarding serviceability, this is impacted by the form factor and features of function and style that designers build, based on consumer and market forces. Many products have no user-serviceable parts inside, so are sealed from the use of ordinary tools. The demand for water resistant mobile devices has created a need to hermetically seal all the exterior joins in the product. Breaking that seal for repair purposes makes the device no longer water resistant – which is often a key user requirement. Resealing a repaired device so it remains water resistant is a difficult and specialised task and not always successful outside of the manufacturing plant. The device might operate okay, so long as it is not exposed to moisture.

Software updates are not essentially repairs to devices unless the intent is to correct an unintended function or mis-operation. Updates must not impact on the device's compliance to specifications, considering the natural ageing of the product with time. Secondary batteries wear out over time and reduces the discharge time. If a software update is intended to fix something but breaks something else, then that is a problem that the supplier should be liable to correct. If an aged battery cannot supply enough charge to operate the device to specifications, then the battery needs to be replaced if it is economical and practicable to do so. The natural decline in battery life or performance of other parts should not be seen as planned obsolescence.

Information request #6a

Products are not designed to fail. Products are designed to perform their intended function for a reasonable period considering the cost and quality of the build and how well they are treated by the consumer. No product lasts forever (although some might last longer than others). Just because a product still works, does not imply that it is not obsolete or obsolescent because of changing networks and user expectations. Users will replace their products when they perceive the value of additional benefits from the new product that they cannot achieve from their existing product.

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 after refurbishing them to get the maximum benefits out of the resources used to make them. Refurbishment is also not considered to be repair.

Information request #6b

The difference between planned obsolescence and organic obsolescence is difficult to distinguish without access to confidential design discussions around the product development and market positioning, which is unlikely to be made available. Bear in mind that low price/low quality/low feature products are commonly made available to the market to meet market demand in that space. For example, not everyone wants a smart phone. Some customers want a phone that just makes voice calls and maybe sends SMS texts.

Information request #6c

If a product is deliberately planned to become obsolete, that implies that it is unfit for its intended purpose as it must meet the Australian consumer guarantee requirements of the ACL regardless of any express warranties.

Information request #6d

Government programs to prevent or minimise planned obsolescence are mentioned in the text of the issues paper. No additional programs should be required. There is always a tension between serviceability of a product, and its form and features. Mobile phones used to be the size of attaché cases, but consumers now want products that will do far more and will fit in a pocket, or even on a wrist.

Information request #6e

Products that meet the requirements of the ACL are deemed to be fit for the market. Adding design requirements for serviceability parameters will add significantly to the cost and reduce design options. While it might extend the physical life of the product a little, it does not address the naturally organic obsolescence that is continually evolving, and it does not address accountability on the third-party repair side. Whilst repairability is an important element of design, there are many criteria to be considered. Focusing disproportionally on repairability can hinder innovation and potentially work against other desirable attributes such as durability and reduced resources consumption. Naturally, as stated earlier, durable, quality products require less repair.

Repairability ratings can only achieve the intended outcome if they are based on harmonized standards which ensure each manufacturer provides the same inputs in the same way. To date this has not been accomplished in any geography. While the concept of repairability ratings might seem attractive, it poses substantial challenges. As Al Group has highlighted in their response to the Right to Repair Issues Paper, "a uniform reparability index rating would require extensive product benchmarking and a specialised series of tests developed for each product to simulate a product's normal working life. This may be complicated and costly".

Information request #6f

There is little specific information available to consumers about durability and repairability of

products, but consumers do rely on the reputation of manufacturers of known brands to make their purchase decisions, and they also rely on express warranties as well as extended warranties. Consumers can also fall back on their rights under the ACL.

Many suppliers offer specific guarantees in addition to the minimum obligations under the ACL, such as 2 years to say 5 years guarantee of fault-free product life, so they can have confidence in these products for those periods. Some manufacturers also guarantee software update support for specific periods or number of software iterations. It would be reasonable for a consumer to assume that if software updates are offered for three years, say, then the product would be usable and serviceable for at least that long, even if the manufacturer's warranty was not explicitly that long.

Often suppliers, and even retailers, offer optional extended warranties beyond the basic warranty, usually for a fee to cover their projected future expenses regarding potential returns. This is common in the ICT industry and it too is a statement of confidence in the quality and reliability of the product.

7. Repair issues for e-waste

Improving the repairability of electronic goods has the effect of extending their useful service life, thus in the shorter term reduces the impact of e-waste issues, but in the longer term, products will inevitably reach the end of a useful service life and be designated to waste management facilities. It needs to be recognised that the repair industry itself generates e-waste by the replacement and disposal of faulty components, and the possible disposal of unused spare parts, tools, packaging and documentation after a significant period of non-use.

AllA members participate in the NTCRS although, as noted in the Right to Repair Issues Paper, the scope of e-waste is much broader than the scope of that program. To assist in that end, the AllA and its members have already provided detailed and extensive input to the public draft revision of Australian Standard AS 5377 – that is DR AS 5377:2020: *Management of electrical and electronic equipment for reuse or recycling.* The scope of this national standard revision says it:

... sets out principles and minimum requirements for the safe and environmentally sound collection and storage, preparation for re-use, treatment and transport of electrical and electronic equipment (EEE), including components, consumables and parts thereof. Data security, traceability for substances of concern, risk management and quality management are also covered ...

It applies to most e-waste that has been collected for waste management and specifies ways to minimise e-waste and hazardous by-products from entering the environment. It encourages the prevention and reduction of e-waste as top priorities, including re-use, refurbishment, repair, and if those are not possible then resource recovery of materials that can be re-used or processed for re-use in other products. Disposal to landfill or incineration is an absolute last resort.

E-waste is not the only waste produced by the electronics industry. There is also packaging waste resulting from packaged electronics goods. Collection and responsible recovery and disposal of this is covered under the Australian Packaging Covenant (APC)⁶ and managed in a co-regulatory scheme through APCO⁷.

It can be seen from APCO's web site that there are over 100 electronics suppliers already members of this scheme, including a number of AIIA members. The AIIA is working closely with its members and APCO to help manage issues related to the APC.

Other waste produced by electronics products is excessive energy use, particularly in relation to older products. There is an ongoing reduction of energy use and increased function in new products compared to older products, so the energy savings achievable through introducing newer technologies is often doing more work for less energy, which also has a benefit to the environment through the emission of less greenhouse gases to operate the equipment for greater workloads. Energy efficiency for a range of electrical and electronics products is regulated in Australia and managed through mandatory Greenhouse and Energy Minimum Standards (GEMS) administered under the Equipment Energy Efficiency (E3) program⁸.

There needs to be a balance between all these programs to ensure that the intentions of one program do not skew the objectives and outcomes of others. For example, it would be disappointing if Right to Repair initiatives saw an increase in product being repaired over products being recycled, but the repaired units were sold into overseas markets where poor quality or no e-waste processing capability exists.

Information request #7a

Simple data on e-waste may not be representing the electronics industry environmental impact in a holistic way, as consideration and balance also needs to be given to reduction of packaging waste and improvement of efficiency in the use of energy. There is already an Australian standard covering the processing of collected e-waste – AS 5377 which is undergoing extensive revision at this time with significant industry support. That standard covers re-use/repair/refurbishment as well as dismantling for materials recovery and identification and safe treatment of hazardous waste to minimise the impact of e-waste on the environment and maximise the use of products and recovered materials.

Information request #7b

Refer to our response in Information request 7a)

Information request #7c

Implementation of AS 5377 at waste collection facilities nationally and the separation of ewaste from the mixed waste stream will minimise the amount of e-waste shipped for

⁶ https://www.environment.gov.au/protection/waste/plastics-and-packaging/packaging-covenant

⁷ https://apco.org.au/

⁸ https://www.energyrating.gov.au/about-e3-program

recycling and will improve the recyclability by the identification and separation of parts and materials into common types. It is understood that that the majority of e-waste processed under NCTRS is manually or mechanically broken down in Australia. After the initial breakdown, some materials may be exported by the recycler for secondary processing that cannot be economically performed in Australia at this time, such as extracting metals from circuit boards or batteries. This export is apparently necessary as Australia is a relatively small market in this context, the cost of setting up such facilities is high and there is insufficient volume in Australia to make it profitable. The industry is not aware of any issues in countries receiving this kind of high value material.

Information request #7d

The ICT industry is looking at the environmental and health effects of the total product lifecycle in Australia, including e-waste management, packaging recycling, and energy savings. Landfill disposal is already the least preferable way of disposal when so many other processes already happen first, however there may be some need for landfill for residual unusable material. Landfill restrictions will further drive those who are not already participating in the circular economy to examine all the alternatives as outlined above.

Information request #7e

It is believed that, in the longer term, the right to repair will have little impact overall on the net e-waste stream in Australia, as ultimately products will reach an end of serviceable life and be directed to waste management facilities. The replacement of faulty parts with repaired parts results in the faulty parts and the packaging of replacement parts then having to be directed to e-waste recycling facilities.

8. Possible policy options

The AIIA has provided general, detailed, and specific responses to issues and questions raised in all preceding sections of the Right to Repair Issues Paper. Many national standards and regulatory processes exist today covering product design, safety, radio, telecommunications, functionality, legal compliance, responsible waste management, packaging, energy efficiency and so on. Repairing electrical and electronic products potentially negatively impacts on all those areas as well as security, privacy, and data preservation as previously discussed. Further regulatory intervention will increase costs to industry that will be passed on to the economy and may prevent the offering of lower cost products or other products where the expense and compliance efforts become issues. Often the replacement or refund of faulty goods is an adequate response to a consumer's needs.

Complex technology necessarily requires specialised tools and processes and highly expensive spare parts and skilled labour, thus proving expensive in any case. For example, how economical is it to repair a Blu-Ray player when the device might retail for under AUD \$100, and the spare parts not much less and labour might cost upwards of \$60 an hour? What about a \$150 digital television? In these cases, it is nearly always cheaper to replace it with the same or similar product rather than repair it. Products are not usually designed to fail because that would impose a heavy burden on the supplier to cover costs of repairs or replacements or refunds under the ACL, which all suppliers would wish to minimise.

Where it may be feasible to economically repair a product, the AIIA agrees that impediments to fair competition, where they exist, should be minimised, and has offered several suggestions in that area. However, any right to repair should not negate a supplier's right to alternatively exchange or refund a faulty product and should not impose burdens on suppliers where it is uneconomical to repair a product, given the age and expected lifecycle of the product.

Information request #8a

As noted earlier, customer satisfaction and retention are the primary and sufficient drivers of high product quality and low product failure rates. In addition, there are many repair partners in Australia today. Hence, we believe policy instruments addressing provision of repair are unnecessary.

- a) Where an OEM or supplier in Australia has available spare parts, specialised tools, and service instructions for authorised repairers, these should be made available to independent repairers on a reasonable and non-discriminatory (RAND) commercial basis.
- b) The OEM or supplier must be permitted to retain intellectual property ownership rights to all their IP and trademarks so anyone distributing unauthorised copies of documentation or firmware or counterfeit specialised parts from unauthorised sources can be held to account. Some suppliers may wish the choice to provide this material free of charge or for a fee to the public or limited to equipment owners or to bona-fide repairers.
- c) Planned obsolescence is very difficult to prove, however if proven it should not be permitted. It must be recognised that some products have a very short natural life cycle. So long as consumers are obviously aware of this in relation to a specific product, it should be fine to sell them (for example, musical greeting cards). A related issue is cheaply dumping products in the market without any intention to honour the ACL rights (which is already regulated).
- d) Consumers of products which have routine firmware updates pushed to them over the internet by the manufacturer or supplier must not be disadvantaged by new or removed or hidden features in the firmware. Consumers should be permitted to opt out of updates at their own risk that they do not wish to receive.
- e) Products of low commercial or replacement value should be exempt.

Information request #8b

Repair, including maintenance and operation of global spare parts supply chains, and the actual repair process conducted by trained personnel, is very expensive.

We recommend that the Australian government push for the finalization and implementation of the Basel Convention Technical Guidelines to help parties (regulators and customs officials) and stakeholders more readily identify used electrical and electronic equipment managed for legitimate repair, refurbishment, and reuse (non-wastes). The documentation and criteria set forth in the Technical Guidelines, which focus on shipments of used electrical

and electronic equipment, will allow parties to more readily identify imports and exports of waste electrical and electronic equipment covered by the Convention, as well as any improper e-waste shipments.

Easily and transparently distinguishing between controlled waste electrical and electronic equipment and non-waste used electrical and electronic equipment is particularly important considering recent discussions around the proposal from Switzerland and Ghana to amend Annex II of the Convention which, if adopted, would expand the types of e-waste that would be controlled under the Convention, such as used IT equipment and parts.

Information request #8c

That there will be significant additional costs is a given, however it is difficult to quantify such costs without seeing the proposed legislation and regulations. Any potential benefits which might result from the policy instruments noted in table 1 remain to be seen. Spare parts should not be required for specific minimum periods as that overrides the supplier's right to replace or refund the product, especially in the early stages of product launch when spare parts are limited. Also, except for accidental or deliberate damage, the spares are unlikely to be used for some time until the warranty periods expire, so there is acquisition, holding, and depreciation costs involved. Spares for uneconomical repairs which exceed the product's depreciated value should not be required at all.

Information request #8d

There are "green" procurement standards that are used by federal government organisations and other purchasers which are required to purchase computers that meet certain environmental performance criteria under the Electronic Product Environmental Assessment Tool (EPEAT)⁹ rating system. These existing policies and programs promote better design, upgradeability, repair and reuse and responsible recovery of materials on discard without the consumer safety, security, or business concerns.

The AIIA is unaware of other international policies or proposals at this time which have not been already raised in the issues paper or this response.

We would welcome a further opportunity to engage with government on this legislation. Should you have any questions about the content of this submission, please contact policy@aiia.com.au.

Yours sincerely,

Simon Bush GM, Policy and Advocacy AllA

⁹ See https://greenelectronicscouncil.org/epeat/epeat-overview/