Dear Commissioners

**Introduction**
I make my comments primarily regarding the issue of skilled repair technician shortages as is recognised in the draft report and was a part of discussions during the 2021 Australian Repair Summit. I also make comment on implementation of a repairability labelling scheme and finally make issues with and suggestions around Australian warranty regulation. I make my comments as a person with employment experience and involvement in design and manufacture of technologically advanced goods for both consumer and commercial markets (Hardware Lead at GardenSpace, 2017-2019 and CTO at Re:Start Charging Services 2018-ongoing) as well as a person with employment experience in repair and warranty service (Mechanic’s Trade Assistant at Mobility Matters, 2016) and personal experience in self-repair.

**Repairability and the Repair Labour Market**

It is my belief that the issue of rising repair costs particularly with respect to technician shortages and wages is directly related to repairability obfuscation. It is my personal experience that many skilled technicians and engineers begin professional interests through unsanctioned self-repair activities. **The ability for general members of the public, particularly youths, to obtain required materials and means to perform repairs directly links to the supply of suitably skilled repair professionals.** Such a link is common sense. The general industry trends towards tightly controlling repair materials have a self-perpetuating effect on the decline of the repair industry via shortage of personnel. Such a link is evidenced by observations put forward by Manufacturer representative Ian McAlister, CEO at CESA during the 2021 Australian Repair Summit in a recorded panel session that technicians are aging and retiring without replacement. There is a somewhat hypocritical nature in industry complaining that there is a lack of repair people then moving towards making repair less accessible. Such impacts on the repair industry via reduced public access to self-repair have not been considered in the draft report.

Consideration of the above is import in discussing potential regulations surrounding “right to repair”. A key concern in “right to repair” is the motivation for manufacturers to “artificially” increase repair costs in order to drive consumers towards higher margin new goods sales rather than possible repair options which have lower environmental impact and greater cost effectiveness for the consumer. Another concern is that by unfairly restricting repair activities to sanctioned repairers, unfairly high repair costs can be charged. Part of the reasoning being used for repair costs being higher (and thus “naturally” less cost effective) AND high repair costs being beyond the choice of manufacturers is the above skilled repair technician shortage. **It should be recognised that the skilled labour shortage can be perpetuated by and is in the interests of manufacturers which engage in repairability obfuscation for anti-competitive reasons.**

When the cost of and profit margins of repair in comparison to new goods is being evaluated, the cost of repair labour in other (international) markets should be considered; especially as smaller goods are often sent overseas for repair.

**Right to Repair Regulation**

Although the above possibility of manufacturers intentionally (or unintentionally) damaging the repair industry (through damage to the labour supply or other means) to drive inefficient market behaviour is difficult to prove to a level enabling litigation, it should be recognised as a possibility and regulations should be considered to help prevent this. An example of a policy which could encourage competitiveness and at the same time discourage such anti-competitive behaviour is a repairability rating standard and labelling scheme which includes in its criteria:

* Access to repair materials by independent professionals
* Access to repair materials by owners of the goods
* Access to repair materials by general public

Repair materials meaning parts, documentation, firmware, software etc. as may be required for repair. Regarding goods requiring complex and potentially dangerous repairs necessitating a professional repair person, goods designed with repairability such that this is NOT the case clearly provide superior value to the consumer with the choice to safely self-repair or engage a professional.

A repairability labelling does not need to be mandated on all consumer goods to be effective. By initiating the repairability labelling scheme on types of goods known for repairability obfuscation, maximum benefit for consumers can be had whilst providing initial awareness for the public and a less disruptive regulation roll-out. Once public awareness of repairability and repairability ratings is established, adoption of repairability labelling can easily and voluntarily spread to other non-mandated goods as long as appropriate repairability rating methods/standards are made available for other non-mandated goods.

As with any rating or standard system, care must be taken to ensure freedom from bias and defence against regulatory capture.

Implementation of repairability policy as above will help to address the damage to repair industry concern as well as other concerns considered in the draft report of consumer and environmental wellbeing. Such policy also achieves its means by encouraging competition rather than forcing industry compliance and as a result is much more likely to see success and benefit to the consumer.

As has been the case in the Automotive industry, it may be ultimately required in some cases to apply more heavy-handed policies.

**Conflicts with Consumer Guarantees**

Market Participation

I also make comment on the conflicting issue of encouraging repairability while increasing regulation around warranties. **The Australian Consumer Law (ACL) and its enforcement together with proposed heavier enforcement on manufacturer warranties is likely to drive manufacturers further towards repair obfuscation in order to discourage unsanctioned repairs**. Enforcement of consumer laws in Australia affords a safety net to consumers rights but goes against enabling free market competition and greatly discourages manufacturers which feel unfairly punished. This has led some international manufacturers to not make their goods available to Australian Consumers at all e.g. Valve and 2yr delayed sale of the Valve Index <https://www.kotaku.com.au/2020/02/valve-index-australia-half-life-alyx-availability/>, <https://uploadvr.com/valve-index-australia/> Although regulators should not allow influence from corporations holding products hostage, consideration should be made for the impacts of making it difficult for manufacturers both domestic and international to (officially) market products in Australia. The same can obviously be said for heavy-handed repairability regulation.

Disincentivised Repairability and Longevity

The consumer guarantee regulations have produced a market condition in which A. consumers expect to buy a good without any failures during the lifetime of the product then discard it once it has failed out of warranty and B. manufacturers are strongly pushed to maximise profit on the sale of new goods whilst preventing out of warranty repairs and to not improve expected product lifetimes.

As the repair/replacement/refund of goods under consumer guarantees is required at the expense of the manufacturer, the manufacturer is indeed incentivised to ensure goods are durable and (if at all repairable) the goods are economically repairable but only by a first-party/sanctioned repairer within the expected durability/warranty of the product. Manufacturers have no incentive to enable independent repair, since any repairs in the expected life of the product must be paid for by the manufacturer. Similarly, manufacturers are incentivised to keep expected product life as short as possible to avoid random failures and needs for repair.

As has been extensively discussed, new product manufacturers/designers obtain revenue primarily by sale of new goods and not from repair. Businesses could theoretically be setup to generate revenue from both repair and new goods manufacture but consumer guarantees mandating free repairs makes it difficult for manufacturers to set up repair as a revenue generating activity.

Increasing warranty regulations will only serve to worsen manufacturer behaviour. Ironically, the reduced durability of modern goods could be blamed on modern durability regulations. Looser warranty regulations and consumer guarantees could instead alleviate this.

**Hypothetical Repair Market and Regulation**

At an extreme, in order to encourage repair for the benefit of the consumer and environment, economic incentive could be given by completely removing free repair/replacement under warranty as an option. Instead, when experiencing faulty goods, consumers would have the choice between a (partial time-based) refund or could pay out-of-pocket for a repair (by the manufacturer or an independent third party). Manufacturers would still have some incentive to sell durable goods (particularly goods that do not fail directly after sale) due to refund requirements, but the issue of random lifetime failures would then be open to solution by the market.

What could then occur is:

* Consumers are more cautious about purchasing goods with better durability and lifetime support
* Manufacturers may choose to provide expanded first-party warranties beyond the regulated minimums to attract consumers e.g. providing free first party repair/replacement similar to current requirements.
* Manufacturers may instead choose to provide ongoing low-cost repair services to attract consumers.
* Manufacturers may also choose to be more open with repair materials and thus indirectly outsource repair to independent repairers.
* Manufacturers could also offer extended life goods by offering end-of-life repairs and upgrades.
* Manufacturers failing to adopt any lifetime support strategies would become uncompetitive

Such a new market would obviously require its own extensive set of new regulations and standards.

* The advertised first-party repair/replacement warranties should be regulated/standardised to ensure consumer confidence in choosing warranty support.
* Advertised costs of first-party repairs for some time period should be guaranteed at sale, likely indexed and standardised to the cost of the good or a replacement.
* Repairability should also be standardised and regulated with a system similar to the repairability labelling scheme, this labelling scheme should be designed to be sufficient for independent repairers to accurately estimate repair costs.

Implementation of such a hypothetical market would obviously be immensely disruptive and likely cause business casualties particularly if introduced poorly or too quickly. It should, however, serve to illustrate the potential for a healthy repair market which is actively discouraged and prevented by current regulations.

**Minimum Required Warranty Regulation Adjustments**

A lighter suggestion is made to loosen warranty regulation/liability on manufacturers/product designers in tandem with introduction of repairability regulation. A clear concern being voiced in submissions and discussions is manufacturer liabilities if independent repairs and/or owner repairs are forcibly enabled. While it is clear that manufacturers must still be held responsible for failures caused by them, a balance must be maintained with explicit means for liability of failures resulting from unsanctioned repairs or modifications to be placed on those responsible for undertaking them. Although such mechanisms could be said to exist already, it should be made clear in order to encourage manufacturer participation in the Australian Market.

“Warranty void if removed” stickers enable manufacturers to determine if a “non-user-serviceable” part of the product has been tampered with by the user or unauthorised repair person. Whether or not another person has opened, or attempted repair of a device is important to the troubleshooting repair process itself and to determining if the fault was due to a defect or instead user/independent mis-repair or misuse. The presence of an unbroken warranty seal is strong evidence that internal faults have not been caused by user or third-party repairs/modifications. If such warranty seals are banned, then there will be extra cost and risk to manufacturers offering warranty from defects. Providing warranty from defects whilst at the same time freely allowing third party modifications and repairs places additional unknowns, uncertainties and risks resulting in increased costs to the manufacturer (and consumer) for offering such a warranty. Manufacturers should be allowed to offer warranty terms with the conditions on warranty seals in order to lower overall risks and costs instead of being forced to comply with rigid warranty schemes.

The issue of consumers being confused and misled on warranty terms should NOT be handled by forcing vendors to comply with a mandated set of warranty terms but instead by improving and enforcing clarity around warranty terms. A labelling scheme could also be effective in this regard with the choice for vendors to comply with standardised warranty terms in exchange for the ability to advertise with an official warranty seal (e.g. Australian Made) or vendors can choose to offer their own special warranty plans without a seal.

Without lighter ACL warranty regulation, manufacturers are strongly encouraged to obfuscate repair or simply not participate. Loosening of warranty regulations will be possible without overall damage to the consumer thanks to tandem increases in right to repair regulation. Over regulation will reduce market participation and thus competition.

Global Harmonisation

A final note. As has been discussed in feedback during the 2021 Australian Repair summit and should be common sense, any regulation or standardisation scheme should try to align with other international markets/regulators. In the modern globalised market, regulators greatly benefit in their market regulation power by working together and should do so whenever possible. Global harmonisation of regulation policy also assists in encouraging market participation from international manufactures as well as easing barriers to international markets for domestic manufacturers. Consumers can benefit directly from reduced costs for bringing products to the Australian market and increased competition.

-Ken Loh