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To whom it may concern,

### **Comment on Product Profile: Battery Chargers**

Thank you for the opportunity to comment on the *Product Profile: Battery Chargers*, the first step in considering battery chargers for regulation under a minimum energy performance standards (MEPS) scheme.

The Australian Industry Group (Ai Group) is a peak industry association in Australia which along with its affiliates represents the interests of more than 60,000 businesses in an expanding range of sectors including: consumer electronics and home appliances, manufacturing; engineering; construction; automotive; food; transport; information technology; telecommunications; call centres; labour hire; printing; defence; mining equipment and supplies; airlines; and other industries. Our membership includes a number of companies that supply battery chargers and related products.

The attachment to this letter addresses the specific questions posed in the product profile while the letter covers critical threshold issues related to battery charger regulation.

### International context

As a relatively small market and importer of battery chargers manufactured overseas, Australia needs to be wary of setting regulation ahead of an internationally accepted approach. If Australian regulation diverges from global regulatory trends it can substantially add to product costs and the regulatory burden in Australia. Further, Australia does not need to move quickly to regulate to benefit from any advances in international regulation as products like battery chargers are developed globally by international brands. Any changes to product design to meet emerging international standards are likely to be incorporated into products sold into Australia.

Given battery charger regulation is still at an embryonic stage internationally it is premature for Australia to regulate in this area. The product profile refers extensively to new and proposed regulation of battery chargers by the Californian Energy Commission (CEC) and by the Federal Department of Energy (DoE) in the United States. In March 2013, the DoE initiated a further round of consultation on its proposed regulation of battery chargers, largely to try and settle inconsistencies between the CEC and Federal approaches. There are a number of issues still to be resolved in these jurisdictions including the scope of products covered, appropriate performance requirements, and testing methodologies. For example, the testing methodology used by the CEC does not isolate battery charging efficiency from energy expended for other uses, such as device management, safety controls, secondary functions such as back-up memory and other device functions. This is

problematic for devices with multiple functions. The methodology has also been criticised for failing to consider safety and reliability considerations for different battery chemistries.

Further, while the product profile draws extensively on a 2006 study from the United States to establish the energy consumption and potential power savings of battery chargers, there have been a number of international technological developments since that time. Market-leading charger and battery technology now often incorporates energy efficient concepts of current flow control and current flow shut down on full charge. Wireless charging is also an emerging trend internationally, although the technology is still at an initial phase and it is too early to establish its implications for energy efficiency.

#### Establishing the case for regulatory intervention

The starting point for any proposed regulation must be whether the regulation is necessary, efficient and cost-effective. A case has not yet been made for the regulation of the energy efficiency performance of battery chargers and needs to be debated by the E3 committee before proceeding to the consultation regulatory impact statement (RIS) stage. In particular, issues around the scope, cost and effectiveness of the regulation are not adequately addressed by the product profile making it premature to conclude that “government intervention appears warranted.”

To establish the cost and necessity of regulatory intervention, the definition of battery chargers needs refinement. The product profile states that it applies to “battery chargers, and products using or incorporating battery chargers, where a battery charger is a device with charge control circuitry for charging batteries for consumer products.” As the product profile notes, this definition picks up a vast array of products. The case for, and cost of, regulating them varies substantially.

Many products with a battery charger function, particularly within the small consumable area, are high-volume, low-cost products with a short lifespan. The energy consumption of these products, and therefore the regulatory and environmental impact, varies considerably. Energy efficiency regulation needs to be targeted to products where tangible savings in energy usage can be achieved. Otherwise, there is a real risk of imposing an unnecessary regulatory and cost burden without any meaningful reduction in energy usage.

Ai Group understands that in the United States manufacturers incurred costs to meet the CEC’s battery charger standard. Quantifying them on an individual basis was not always possible as they varied based on regional locations and the complexity of a given design. However, in some cases product costs to the end consumer increased by as much as 20%. Such a rise was not justified by the energy savings associated with meeting the CEC standards for all products, which in some cases equated to an improvement of a tenth of a watt (or 1 per cent) efficiency improvement. This experience needs to be considered in Australia if battery charger regulation proceeds. The US also proposes to exempt spare and replacement parts for seven years to avoid functional products already in the market from being discarded unnecessarily.

There are also an increasing number of products whose primary function is not a battery charger but which can act as battery chargers when connected to a second product. For example, many consumers now connect their smartphone to a television HDMI port to access MHL image transfer technology. As the image from the smart phone is being transferred to the television, the smartphone is also charged. A large percentage of small audio systems include docking ports so that mobile phones and MP3 players can interface with the audio system, but an additional benefit is the charging of the mobile phone whilst in the dock. Some products include more than one dock so that multiple products can be charged at the same time. Similarly, other products can be charged via a

USB connection, for example, 3D glasses connected to a television. Some of these products are already regulated under existing MEPS schemes. More consultation is needed to establish the range of products that could and should be caught by a battery charger MEPS scheme.

Should regulation of battery chargers be considered, we recommend setting boundaries around the products included in the scheme to avoid duplication with other MEPS schemes and to ensure the regulation is efficient and cost-effective.

Any products or components already regulated under MEPS, such as televisions and computers, and any products that use an already regulated product to charge, should be automatically excluded from a battery charger scheme to avoid double-regulation. If the broad definition of a battery charger proposed by the product profile is applied, the large number of affected products will mean very high product registration and testing costs that are likely to be disproportionate to energy efficiency savings for some products. Any battery charger scheme should therefore exclude products:

1. below a minimum specified energy consumption threshold or thresholds; and
2. that have in-built control circuitry which cut-off energy consumption once a product is charged.

Grandfathering provisions should apply to spare and replacement parts and to products imported or manufactured prior to regulation being introduced.

If the E3 committee decides to move to the consultation RIS stage there are a number of other issues that should be considered when judging the cost and timeframe for introducing regulation:

- the time required to make an Australian standard which should act as the basis for the GEMS determination;
- allowing sufficient lead time between making a standard and product determination and requiring compliance. In the United States, the DoE proposes to allow two years from the point when the final notice of proposed rulemaking for battery charger regulation is included on the Federal register before compliance is mandated. A similar timeframe would need to be allowed in Australia.
- Should regulation be introduced, the registration procedure should be made as simple as possible. An appropriate lead time for registration should be allowed and the website allowing registration should be live in advance of the regulation commencing.

Thank you for the opportunity to provide comments.

Yours sincerely,



Dr Peter Burn  
Director Public Policy  
Australian Industry Group

Battery Chargers Product Profile – Key Questions	Comments
<p>Do you agree with the market data presented for Australia and New Zealand? In particular, do you agree with the estimates of current and projected stock and sales of battery chargers? Are there any products that are only sold in New Zealand or Australia?</p>	<p>The definition of a battery charger needs to be more clearly defined to answer this question. The broad definition included in the product profile is likely to pick-up products that are not included in the current list, such as televisions which act as battery chargers for 3D glasses.</p> <p>We are concerned that the estimation about the energy use and potential power savings of battery chargers in the product profile appears to be largely based on a 2006 research study conducted in the United States as some of this information is now likely to be out of date. For example, linear chargers with an isolating transformers, which were profiled in the 2006 report, are rarely used now.</p> <p>For the products listed in the product profile, we note that it is based on 2010 sales data. Dynamic product categories such as mobile phones and personal computers and laptops can experience rapid changes in sales trends and therefore more recent sales data may be required.</p>
<p>Do you agree with the breakdown of sales between the various product types? Are there any major trends that are not specified in the product profile for Australia and New Zealand?</p>	<p>See above and main letter.</p>
<p>Do you agree with the projected trends? Are the average efficiency, size and operating hours accurately estimated for Australian and New Zealand?</p>	<p>See above and main letter.</p>
<p>Is there a source of sales weighted average efficiency of devices in Australia or New Zealand that can be used for further analysis?</p>	<p>Data availability will vary by individual product categories. This question is best answered once agreement is reached on the range of products that should be considered for regulation under a battery charger MEPS scheme.</p>

<p>What do you think would be the best way for governments to facilitate an increase in the average energy efficiency of battery chargers sold?</p>	<p>The following activities would facilitate an increase in energy efficiency.</p> <ol style="list-style-type: none"> <li>1. Active engagement with the industry to consider technically feasible solutions and to stay abreast of international developments.</li> <li>2. Appropriate guidelines or standards</li> <li>3. Incentives to encourage the sale of energy efficient battery chargers in the country.</li> </ol>
<p>Do you think that there is a case for MEPS for battery chargers and implementing a government regulated trans-Tasman MEPS?</p>	<p>As a first step, more work is required to determine whether a case exists to regulate battery chargers. This work needs to address a number issues such as:</p> <ul style="list-style-type: none"> <li>• Better defining the products proposed to be regulated;</li> <li>• Identifying the costs of the scheme (which cannot be done until a clearer definition is in place);</li> <li>• Determining whether the costs are proportionate to the risk that the regulation seeks to address;</li> <li>• Developing appropriate test methodologies</li> <li>• Considering the practicalities of regulating battery chargers under MEPS, such as whether products are able to be labelled or carry markings and the cost and effectiveness of doing so.</li> </ul> <p>Should regulation be pursued, it would be advisable for a consistent approach in Australia and New Zealand as the same products are sold into both markets and any discrepancy in the requirements would impose additional costs on industry.</p>
<p>Is there a preferred international standard/regulation or protocol that could be used as the basis of a government regulated MEPS and/or labelling program?</p>	<p>We do not consider that the case has been made for regulating battery chargers.</p> <p>If regulation is proposed, it is important that Australian regulation is consistent with international approaches. Australia is a small market which imports battery charger products developed for global markets. Any deviation from international regulation will impose an unnecessary cost and administrative burden on products supplied in Australia.</p> <p>More time is needed to allow international standards develop as at present there is no leading international standard endorsed by Ai Group members that could be used for regulating MEPS.</p> <p>The CEC commenced regulation of battery chargers with effect from February 2013. This means there are a proportion of products that are now being designed to meet the CEC requirements. However, there are some significant issues with the testing methodologies utilised by the scheme, in particular the fact that the testing methodology does not adequately distinguish between power consumed by</p>

	<p>the battery charging function and power consumed by other functions in multi-use devices.</p> <p>These issues are currently the subject of consideration by the Federal DoE in the United States which is also considering battery charger regulation. Until these points are resolved it would be premature to follow either standard in Australia, although they may be a basis in the future if they become the basis for battery charger design.</p> <p>Alternatively there may also be advantages in adopting European standards as Australia's mains supply is the same (230V) as Europe. The US supply voltage is half that of Australia's and would require additional tests at the higher input voltage adding extra costs. Multi voltage supplies are only required to comply with efficiency regulations on the intended market voltage, multi voltage battery changers may not necessarily comply over the whole voltage range.</p> <p>Once an international standard emerges, it will be that an appropriate Australian standard is in place and that any GEMS determination is consistent with that standard.</p>
<p>What additional costs do you think this would place on industry compared to the current situation? What impact do you think it would have on competition and consumer choice?</p>	<p>The costs will depend on the details of any new regulation. However, examples of likely additional costs that may be imposed on the industry include:</p> <ul style="list-style-type: none"> <li>• If the requirements deviate from international standards, costs for product re-design.</li> <li>• Measurement, data collection and administrative costs (for example, registering products).</li> <li>• Product registration costs</li> <li>• If the regulation applies to current models, there will be costs for discarding non-compliant models and their service parts.</li> <li>• If new labels are required, costs to design, print and apply labels.</li> </ul> <p>If registration or compliance lead times are longer than other markets, it will delay the introduction of the new models in Australia compared with other markets which may also have a negative impact.</p> <p>There may also be indirect costs imposed on consumers. For example, if service or repair parts are covered by the regulation, consumers will not be able to obtain appropriate repairing service for battery chargers and will have to discard the products to be used with batteries even though the products themselves can be still used. In the US, a seven year exemption for spare and replacement parts is proposed to avoid unnecessary disposal of functional equipment already in the marketplace. A similar approach needs to be considered in Australia. Grandfathering provisions should also apply to products imported or manufactured prior to the introduction of any regulation.</p>

Are there any other issues that may impact on the potential regulation of battery chargers?

As the product profile notes, other jurisdictions are currently considering the issue of appropriate markings. It would be sensible to wait for this point to be resolved to see whether an internationally harmonised approach to markings is agreed. The high volume of products that could be caught by the scheme means labelling costs will also be high and possibly disproportionate to the issues the scheme would seek to address. The size, shape and price of products caught by a battery charger MEPS scheme will also have a practical impact on the label or markings that can be used.

Battery chargers provided as service parts or repair parts should be exempted. Current rechargeable batteries which consumers already have will become redundant if older chargers are broken or unavailable.

Professional products should be exempted because those products tend to be used for long time and designing cycle is also long. As the sales of professional equipment are rather small compared to consumer products, the benefit acquired by the regulation is also small.

If the cost to comply with the standards is prohibitive, this will reduce the choice of products available to the consumers. Pricing may also be affected.

Products imported or manufactured prior to the introduction should be grandfathered.

Other comments

There are a number of general principles that Ai Group considers should apply to MEPS schemes:

- New schemes should automatically exclude any product regulated by an existing scheme to avoid duplication.
- Product determinations should reference the relevant standard and should not deviate from it.
- Sufficient lead time needs to be allowed between making a standard and product determination and requiring compliance. In the United States, the DoE proposes to allow two years from the point when the final notice of proposed rulemaking for battery charger regulation is included on the Federal register before compliance is mandated. A similar timeframe would need to be allowed in Australia.
- Should regulation be introduced, the registration procedure should be made as simple as possible. An appropriate lead time for registration should be allowed and the website allowing registration should be live in advance of the regulation commencing.