

Button Battery Safety

Final Recommendation to the Minister: Addendum

December 2020

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1. Introduction

The Australian Competition and Consumer Commission (ACCC) has prepared a *Button Battery Safety - Final Recommendation to the Minister* (**Final Recommendation**) for consideration by the Assistant Treasurer.

This addendum report provides an update on the World Trade Organization (WTO) notification process that was underway when the Final Recommendation was developed.

- On 30 September 2020, the ACCC, via the Department of Foreign Affairs and Trade (DFAT) notified the WTO of the proposed requirements for the button battery related safety and information standards as required under Article 2.9.2 of the Technical Barriers to Trade agreement.
- Comments on the notification were due by 30 November 2020, following the 60 day notification period. One member nation, the European Union (EU), provided comments on the notification.
- Comments were also received from 7 industry stakeholders, including several overseas industry associations:
 - Battery Association of Japan
 - o Japan Electronics and Information Technology Industries Association
 - Federation of the Swiss Watch Industry
 - United States Toy Association
 - British Toy & Hobby Association
 - Asia Toy and Play Association
 - Anonymous submission from an electronic equipment supplier

The comments provided by the EU and the United States, British and Asia toy associations each raised similar issues.

2. ACCC recommendation

The ACCC has made some amendments to the draft legislative instruments to provide additional clarification and address issues raised in relation to product testing (see **Attachment A**).

3. WTO consultation: Summary of stakeholder feedback

While submissions in response to the WTO notification provided broad support for the introduction of the mandatory standards, industry stakeholders raised concerns that the scope of the proposed requirements did not completely align with international industry standards.

Concerns were raised that deviation from international industry standards will effectively raise technical barriers to trade and would be inconsistent with WTO obligations. The Technical Barriers to Trade agreement (TBT agreement) aims to ensure that technical regulations, standards, and conformity assessment procedures are non-discriminatory and do not create unnecessary obstacles to trade. Importantly, the TBT agreement recognises WTO members' right to implement measures to achieve legitimate policy objectives, such as the protection of human health and safety, or protection of the environment. The TBT Agreement also prefers performance based product regulations rather than design or

descriptive characteristics whenever appropriate as this also helps in avoiding unnecessary obstacles to international trade.

TBT agreement principles raised in submissions included a reference to Article 2.6 (which encourages members to participate in international standard setting processes) and Article 2.7 (which encourages positive consideration of other member state standards provided they adequately fulfil the regulatory objectives):

There is a risk that for certain products, any technical barriers which result from deviation between industry standards and mandatory requirements specific to Australia could result in products being withdrawn from the Australian market. Comments suggest the two issues most likely to result in overseas suppliers discontinuing supply of product to Australia are:

- Deviation from existing industry standards for warnings on the packaging of products that contain button batteries. Toy standards contain requirements for packaging warnings for lithium coin cell button batteries, as well as warnings in instructions for button and coin cell batteries. The proposed information standard would be more onerous than the current toy standards by requiring at a minimum, a warning symbol on packaging for all types of button and coin cell batteries. Toy associations argue that existing toy standards have been effective in reducing injuries and fatalities and that there is no need for packaging warnings for non-lithium batteries.
- Deviation from existing industry standards for child-resistant packaging of button batteries. The current international industry standard that applies to lithium batteries specifies child-resistant packaging for lithium batteries with a diameter of at least 16 mm. The Battery Association of Japan argues that this diameter was chosen specifically because data suggests lithium batteries of this size and greater are responsible for fatalities and severe injuries. The proposed safety standard for button batteries would be more onerous by requiring child-resistant packaging for all sizes of lithium batteries.

Submissions raised the following substantive issues for consideration. Each of these is considered in later in the paper at 3.1, 3.2 and 3.3.

Alignment of the proposed requirements with international industry standards

- Requirements that deviate from international industry standards may raise technical barriers to trade and if unreasonably or unnecessarily applied would be inconsistent with WTO Technical Barriers to Trade principles. This may result in products needing to be reworked for Australia and require changes to existing, optimised supply chain processes. This would be avoided if there is convergence of other member's standards to ours in the future.
- The industry submissions recommended that the requirements of the mandatory standards completely align with the scope and exclusions in international industry standards, or otherwise products that meet the requirements of certain industry standards be excluded from the mandatory standards.
- Submissions further recommended that the warning requirements completely align with international toy industry standards.
- It was also suggested that use of the term 'button battery' to refer to both coin and button batteries will create confusion and the proposed requirements should apply the same terminology as existing international industry standards.

Product testing

• Test reports should only be required to be made available to Australian regulators upon request, rather than on a systematic basis during import procedures. Such an approach had already been adopted by the ACCC.

- The submissions recommended that suppliers use normal quality assurance processes to ensure that production continues to represent what was tested, rather than specifying a quantity of samples to be tested.
- Certain stakeholders also recommended that certain products, such as luxury watches set with gemstones, be exempt from the proposed requirements, or alternatively that suppliers be allowed to carry out the tests on the battery compartment model across a certain product range, rather than testing each product individually.

Other issues

Stakeholders also recommended that:

- The transition period be changed to 2 years.
- Non-mandatory recommendations should be removed from the mandatory information standards and instead added to guidelines.
- Certain warning recommendations be amended to be made available 'on the web', rather than on packaging.
- Certain industry standards, such as the horology industry standard for shock-resistant wrist watches, be added to the list of applicable industry standards.

3.1. Alignment of proposed requirements for consumer goods containing button batteries with international industry standards

Industry stakeholders have recommended that the proposed requirements should completely align with international industry standards. Deviation from international industry standards has been repeatedly raised by many industry stakeholders during wider consultation on the proposed requirements for the mandatory standards.

There are a range of industry standards for various products and equipment that have been developed to include button battery safety requirements. Many of these industry standards apply vertically to specific product categories such as audio visual and information communications technology equipment, electric toys, and lighting products. While there are broad similarities in the button battery security and compliance tests that are included in these industry standards, there are also differences between these industry standards. Some of the variations that exist between industry standards include:

- the scope of application for instance, broad application to the relevant category of products or more narrow application to only products that contain button batteries that are intended to be replaced by the user or equipment that is likely to be accessible to children
- warning requirements including differences in warning content and the locations of warnings on products. For example, only in limited cases are warnings required on the packaging of products that contain button batteries and in most industry standards, warnings are required in the instructions only.

Industry stakeholders have expressed concern that the scope and exemptions of the proposed mandatory standards do not align entirely with international standards. Similarly, industry stakeholders have expressed concerns that the proposed information standards have some differences to the warning requirements in existing international standards.

Given the wide range of products affected and the variation that exists between the international industry standards, it is not possible to completely align the proposed requirements to each and every relevant industry standard. One option to address deviation with international industry standards is to provide suppliers with the option of complying with

the mandatory standards by meeting the requirements of their respective industry standards, where those standards adequately provide for safety.

In response to feedback received on the proposed requirements as outlined in the ACCC's *Button Battery Safety – Assessment of regulatory options – Consultation paper* (March 2020), the ACCC made many adjustments to earlier proposals to minimise the extent of deviation from international industry standards.

- The proposed safety standard for consumer goods that contain button batteries provides suppliers with the option of complying with the referenced clauses of an applicable industry standard deemed to have acceptable button battery security and compliance testing requirements
- The warning requirements in the proposed information standard for consumer goods that
 contain button batteries do not conflict with warning requirements in existing international
 industry standards. However, the requirements do go beyond what is currently required
 for some products.
- The proposed information standard for consumer goods that contain button batteries includes best practice recommendations for certain warnings to provide flexibility and avoid mandating warning requirements that are specific only to Australia.

In addition to being a member of the WTO, Australia is also a member of other international organisations, including the Organisation for Economic Co-operation and Development (OECD). The OECD released a new legal instrument setting out recommendations to member countries on consumer product safety in July 2020. The recommendation on Consumer Product Safety¹ recognises that consumers have a right to expect products on the market are safe under reasonably normal or foreseeable consumer use or misuse. The recommendation also requires member country governments to examine the possibility of alignment with existing international standards when developing or reviewing domestic standards or technical regulations.

The proposed safety and information standards for consumer goods containing button batteries meet the OECD recommendation and while it may be a technical barrier to trade it is reasonable and necessary to apply the regulation to protect human safety. The ACCC has satisfied itself that the proposed mandatory standards adhere to the full range of Australia's international obligations.

Scope of mandatory standards

With respect to the scope of the mandatory standards, certain exemptions have been included or more flexible requirements introduced for products with lower risk profiles. The ACCC does not recommend aligning the scope of the mandatory standards to completely match relevant industry standards. This is because there are slight differences in the scope of industry standards – for instance, some industry standards apply button battery safety requirements only to products where the battery is intended to be replaced by the consumer, or only to products that are likely to be accessible to children, while other industry standards do not include such a restricted scope for the category of goods to which they apply.

The ACCC considers that the safety standard for consumer goods that contain button batteries should broadly apply to products that contain button batteries, as button batteries that are not intended to be replaced can still be released from products during reasonably foreseeable use and misuse conditions if not properly secured. The ACCC does not consider that the scope of the safety standard for consumer goods that contain button batteries

OECD, Recommendation of the Council on Consumer Product Safety (https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0459)

should be restricted to products that are likely to be accessible to children as such a scope would be open to subjective interpretation. The ACCC notes that many consumer goods that contain button batteries can be accessible to children in households and should meet the requirements of a mandatory safety standard, subject to exemptions.

Warning requirements

With respect to warning requirements, the ACCC does not recommend allowing suppliers to comply with the mandatory information standard by meeting the requirements of their respective industry standards. While there is value in aligning with international industry standards, the variation in warning requirements presents a challenge in this regard.

Warning requirements in international industry standards that include button battery requirements typically include requirements that only apply to the instructions and only in limited cases include requirements for warnings on packaging.

The key deviation is the ACCC's proposed requirement for the safety alert symbol to be on the front panel of the packaging of all button batteries regardless of chemistry. The ACCC considers that packaging warnings on the front panel of the packaging will enable consumers to make an informed choice prior to the purchase of a product and are also considered beneficial in raising consumer awareness of the presence and hazards of button batteries. In response to earlier consultation, the requirement for packaging warnings have been adjusted to provide considerable flexibility, by allowing symbols to be used in lieu of text warnings.

While the refined warning requirements go beyond the scope of many international industry standards, and will require suppliers to update packaging and instructions for products supplied to Australia, they do not conflict directly. This is important as the warning requirements in the mandatory information standard do not have the consequence that packaging and instructions would be necessary specific for only the Australian market. For example, toys that comply with the labelling requirements in the information standard for products containing button batteries will also comply with the mandatory requirements in the US and EU mandatory toy standards.

Applying consistent battery terminology

Industry stakeholders submit that the use of the term 'button battery' to refer to both coin and button batteries will create confusion and the proposed requirements should use consistent terminology as existing international industry standards.

It is submitted that many international industry standards distinguish between coin and button batteries as follows:

- Coin batteries are small round batteries where the overall height is less than the diameter and having an electrochemical system that contains lithium.
- Button batteries are small round batteries where the overall height is less than the diameter and having an electrochemical system that does not contain lithium.

The ACCC's Final Recommendation refers to 'button batteries' as a reference to both coin cell and button cell batteries. Where it is necessary to distinguish between types of button batteries, the relevant battery chemistries and diameter sizes are specified.

Similarly, the proposed mandatory standards define 'button battery' as a small, single cell battery with a diameter greater than the battery's height', unless it is relevant to specify the chemistry or diameter size of the button battery, such as where requirements are specific to button batteries of lithium chemistry or button batteries with a diameter of 16mm and above.

The ACCC considers that the proposed mandatory standards have clear definitions and specify the relevant battery chemistry and diameter size as appropriate. To avoid potential confusion, the ACCC propose to include reference to 'button/coin' in the titles of each of the legislative instruments and expand the definition of 'button battery' to 'button/coin battery'.

3.2. Alignment of proposed requirements for button batteries with international industry standards

An industry stakeholder, the Battery Association of Japan (BAJ) requested changes that would further align the proposed mandatory standard with the relevant international industry standard, IEC 60086-4:2009 *Safety of Lithium Primary Batteries*, including the scope of the child-resistant packaging requirements, packaging warnings and battery marking recommendations.

Scope of child-resistant packaging requirements

The BAJ requested that the scope of the safety standard for button batteries be amended to align with the international battery industry standard.

The requirements for the proposed mandatory safety standard apply child-resistant packaging requirements to all lithium batteries regardless of diameter and to non-lithium batteries with a diameter of 16 mm and above.

The relevant international industry standard, IEC 60086-4:2009, applies only to lithium batteries with a diameter of 16 mm and above for child-resistant packaging. The ACCC understands the relevant international industry standard that applies to non-lithium batteries, IEC 60086-5: 2016, is being revised and is expected to include a child-resistant packaging requirement for non-lithium button batteries that have a diameter of 16 mm and above.

The BAJ submitted that the 16 mm threshold in the IEC standard was deliberately chosen because available data implicates only batteries with a diameter of 16 mm or greater in fatal accidental ingestion incidents.

Button battery ingestion incidents have been the focus of most research and reporting. The available ingestion data indicates a significant difference in risk profiles between button batteries of lithium chemistry and button batteries of a chemistry other than lithium.

Button batteries that are inserted into body orifices such as the ear and nose can also cause severe injuries such as facial palsy and septum perforation. Smaller batteries are more likely to be implicated in insertion incidents while larger batteries are more likely to be implicated in ingestion incidents. Even small lithium batteries have the capacity to cause significant injury quickly due to their high voltage.

The ACCC does not recommend excluding small lithium batteries from the child-resistant packaging requirements due to the high voltage and increased risk profile of these batteries.

The ACCC's full consideration of this issue is outlined in Section 4.3 of the Final Recommendation.

Battery packaging warnings

The proposed mandatory information standard for button batteries include requirements for warnings to be marked on battery packaging. It specifies that certain warning elements should be printed on the front panel, and allows flexibility for certain warnings to be provided on a secondary panel where there is insufficient space.

The BAJ submitted that there is limited space on certain battery packaging and that it may not be possible to add warnings to the front of the packaging in all circumstances. It is submitted that including a statement that certain warnings 'should' be located on the front panel is confusing as to whether the front panel warnings are a requirement or a recommendation. It requested removing the words 'front' and 'secondary' from the standards.

The relevant clause of the proposed information standard provides that 'without limiting where the warning is marked... the warning may be marked on the packaging'. The ACCC considers this language clearly provides flexibility to suppliers as to the location of warnings on battery packaging and does not consider any changes necessary. Avoiding being overly prescriptive is also consistent with WTO expectations.

Battery marking recommendations

The proposed mandatory information standard for button batteries includes a best practice recommendation that all button batteries be marked with an internationally recognised 'keep out of reach of children' symbol.

The BAJ submitted that the relevant international battery industry standard requires this marking only on lithium batteries with a diameter of 20 mm or greater. It asserts that the 20 mm threshold was chosen because batteries of this size have enough surface area to display an identifiable safety symbol. BAJ requested that batteries with a diameter smaller than 20 mm be excluded from this recommendation.

While the ACCC does not consider it appropriate to exclude batteries of a specific size from this recommendation, it recognises that is not practical to mark very small batteries with a warning. For this reason the ACCC recommends qualifying the battery marking recommendation so that it applies only to batteries 'where size permits'.

3.3. Product testing

Test reports to be provided on request

Industry stakeholders recommended that compliance test reports should only to be made available to Australian regulators upon request, rather than on a systematic basis during import procedures.

The ACCC agrees that compliance test reports should not be required on a systematic basis when consumer goods are imported, but rather be made available on request by a regulator. This will be detailed in guidance to be made available to suppliers.

Representative samples

The Federation of the Swiss Watch Industry (FSWI) recommended that certain products, such as luxury watches set with gemstones, be exempt from the proposed requirements, or alternatively that suppliers be allowed to carry out the tests on the battery compartment model across a certain product range, rather than testing each product individually.

The ACCC does not consider that tests should be confined to the battery compartment model of a product that is common across a certain product range. However, the relevant clause of the proposed safety standard provides that 'representative samples' of the consumer goods must be tested. The ACCC considers this language provides sufficient flexibility to suppliers in determining the need to test each and every model where there are small variations in a product line, such as different styles, colours or decorative additions.

Quantity of samples to be tested

The proposed mandatory safety standards include a requirement that 10 or more representative samples of consumer goods / battery packaging are tested in accordance with referenced compliance tests.

Industry stakeholders have recommended that suppliers should be able to use normal quality assurance processes to ensure that production continues to represent what was tested, rather than specifying a quantity of samples to be tested.

The ACCC has considered this issue further and having regard to the wide range of products and large variance in production runs and batch sizes, agrees that it is not necessary to mandate a strict quantity of samples to be tested to achieve compliance. Accordingly, it is proposed that '10 or more' be removed from the requirement for testing of representative samples in the mandatory safety standards.

The ACCC considers that suppliers should conduct ongoing and repeated tests on products to ensure that the samples taken for testing from a bulk lot are representative of the products manufactured. This will be detailed in guidance to be made available to suppliers.

3.4. Other issues

Transition period

The BAJ submitted that the relevant international industry standard, IEC 60086-4:2009, identified 24 months as a realistic period for transition to compliance with child-resistant packaging requirements. It requested that the period for transitioning to child-resistant packaging in the proposed mandatory standard be extended from 18 months to 24 months.

The ACCC considers 18 months is a reasonable period for transition based on stakeholder feedback and expert advice. In considering the appropriate length of time for suppliers to adapt to the mandatory safety and information standards, the ACCC has had regard to the extent to which the proposed requirements harmonise with national and international industry standards.

The ACCC's full consideration of the transition period is outlined in Section 4.3 of the Final Recommendation.

Best practice recommendations in information standards

Industry stakeholders submitted that non-mandatory recommended text will lead to confusion and should be made available separately in guidance materials.

A mandatory information standard provides flexibility to include both mandatory requirements as well as best practice recommendations. The ACCC considers that non-mandatory recommendations should be included in the information standards to enable all requirements and recommendations to be made available for clarity and ease of reference. This will assist suppliers and their and legal and compliance representatives to access all requirements and best practice recommendations from the Federal Register.

The ACCC considers the mandatory information standards clearly distinguish mandatory requirements and non-mandatory recommendations and does not consider any changes necessary. This will also be made clear in guidance to be made available to suppliers.

Warnings to be allowed to be supplied 'on the web'

The BAJ submitted that certain warning recommendations be amended to be made available 'on the web', rather than on packaging. While best practice recommendations, there is a benefit to such warnings be provided on the packaging of button batteries as opposed to only being made available online. The ACCC does not consider any changes are necessary to these recommended packaging warnings.

Addition to the list of applicable industry standards

The FSWI submitted that the international industry standard, ISO 1413:2016 *Horology - Shock-resistant wrist watches*, be added to the list of applicable industry standards in the proposed safety standard for consumer goods that contain button batteries. This proposed safety standard include a list of applicable standards that are deemed to have acceptable button battery security and compliance testing requirements and that suppliers may comply with for the purposes of demonstrating the requirements have been met.

The ACCC does not consider that ISO 1413:2016 should be added to the list of applicable industry standards that are deemed to have acceptable button battery security and compliance testing requirements. This is because each of the applicable industry standards listed in the proposed safety standard have been developed to include battery security and compliance tests that are specifically focussed on improving button battery safety. On the other hand, ISO 1413:2016 does not include similar battery security and compliance tests.

In response to earlier consultation, including in response to issues raised by the FSWI with respect to certain tests referenced in applicable industry standards may be inappropriate, the ACCC has introduced flexibility into the proposed safety standard for consumer goods containing button batteries. This proposed safety standard now provides that, where a test specified in a product-specific industry standard is not appropriate for a particular consumer good, an alternative test may be applied. This is on the condition that the application of the alternative test, along with the other specified tests of the product-specific industry standard, ensures that the requirement is satisfied. That is, the compartment in which the battery is held is resistant to being opened by young children.

4. The regulatory options

The processes outlined above have not changed the assessment of the regulatory options set out in chapter 5 of the Final Recommendation.

Appendix A: Recommended alterations to the legislative instruments

Titles/definitions

The ACCC recommends including reference to 'button/coin' in the titles of each of the legislative instruments and expanding the definition of 'button battery' to 'button/coin battery' to avoid any potential confusion as to the application of the mandatory standards to both coin and button cell batteries.

It is recommended that the legislative instruments be titled as follows to make it clear that the regulations apply to button and coin cell batteries:

- Consumer Goods (Products Containing Button/Coin Batteries) Safety Standard
- Consumer Goods (Products Containing Button/Coin Batteries) Information Standard
- Consumer Goods (Button/Coin Batteries) Safety Standard
- Consumer Goods (Button/Coin Batteries) Information Standard

It is recommended that the definition of 'button battery' in each instrument be changed to 'button/coin battery':

- button/coin battery means a small, single cell battery with a diameter greater than the battery's height.

Representative samples

The ACCC recommends that '10 or more' be removed from the legislative instruments in relation to the quantity of representative samples to be tested in order to comply with the mandatory safety standards. This is due to unintended consequences that may arise where suppliers test 10 samples of a product at a point in time, rather than on an ongoing basis. Further, the quantity of samples to be tested should be based on the size of the production run in accordance with standard quality assurance processes.

It is recommended to remove '10 or more' from references to testing as follows:

- 'before the supply of [the applicable button battery/the consumer goods] to a consumer, 40 or more representative samples of the [packaging/consumer goods] are tested in accordance with...'

Requirements and recommendations to mark button batteries with a warning symbol

The ACCC considers that the requirement that certain lithium button/coin batteries must be marked with an international recognised "keep out of reach of children" symbol should include that the symbol have a diameter of at least 6 mm.

The ACCC considers that the recommendation that button/coin batteries be marked with an internationally recognised "keep out of reach of children" symbol should include a qualifier that this will depend on the size of the button battery. This is because certain smaller sized button batteries will have insufficient space on the cell of the battery to include a visible and prominent symbol.

It is recommended that the requirement to mark certain lithium button/coin batteries with an internationally recognised "keep out of reach of children" symbol include that the symbol

- has a diameter of at least 6 mm

It is recommended that the recommendation to mark button batteries with an internationally recognised "keep out of reach of children" symbol include a qualifier as follows:

- (1) If there is sufficient space, a button/coin battery should be marked with an internationally recognised "keep out of reach of children" symbol that:
 - (a) has a diameter of at least 6 mm;
 - (b) is clearly visible, prominent and indelible.

Warning requirements

The ACCC considers that the warning requirements in the information standards would benefit from increased clarity that warnings must include the substance of the matters specified, as opposed to verbatim reproduction, and that the warning symbols included in the information standards are suitable examples. This is intended to provide some flexibility in the design of warnings and avoid any direct conflict with industry standards.

It is recommended that warning requirements in each of the information standards include the words 'the substance of' when referring to the matters to be covered in the relevant warning as follows:

- If the consumer goods are accompanied by instructions, the instructions must include a warning about the button battery that is clearly visible, prominent and legible and includes the substance of all the matters covered by subsection...
- If the consumer goods are packaged and are not accompanied by instructions, a warning about the button battery that includes the substance of all the matters covered by subsection... must be attached to, or included with, the consumer goods.
- If the consumer goods are not packaged, a warning about the button battery must be attached to the consumer goods that includes the substance of all the matters covered by subsection...

It is recommended that the meaning of *international recognised safety alert symbol* and *internationally recognised "keep out of reach of children" symbol* be amended as follows:

- A suitable example of an *internationally recognised "keep out of reach of children" symbol* includes the safety signs set out in figure F.1 of clause F.4 of Annex F of the Primary Batteries Standard.
- A suitable example of an *internationally recognised safety alert symbol* includes symbol ISO 7010-W001.