



# Review of mandatory safety standards for children's toys

## Consultation paper

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### **Disclaimer**

The Australian Competition & Consumer Commission (ACCC) has developed this consultation paper to seek the views of stakeholders about the safety standards for children's toys.

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# 1. Introduction

The Australian Competition and Consumer Commission (ACCC) has prepared this consultation paper as part of our review of mandatory safety standards for children’s toys.

This consultation paper is in the format of a Regulation Impact Statement (RIS). The Australian Government requires a RIS to inform every regulatory policy proposal, unless it is a minor update to existing laws. The RIS process assesses the costs and benefits of policy options to ensure any regulation provides the greatest benefit to the Australian community.

This consultation paper invites stakeholders to comment on a number of issues and options. A summary of key questions is at section 10.

# 2. The problem and need for government action

Governments enforce the mandatory safety standards for toys to reduce the risk of serious injury and death to children using these products. Table 1 lists the five mandatory safety standards for children’s toys and the safety hazards they address.

**Table1: Mandatory safety standards and hazards addressed**

Mandatory safety standards	Safety hazards
Toys for children up to and including 36 months of age	Choking Suffocation Small batteries
Children’s projectile toys	Choking Eye injuries Flesh wounds
Children’s toys containing magnets	Ingestion of hazardous magnets
Flotation and aquatic toys	Drowning
Lead and other elements in children’s toys	Damage to physical and mental health

The ACCC is reviewing the five mandatory safety standards for children’s toys because:

- we want to see if the mandatory safety standards are still effective in addressing the safety hazards
- the mandatory safety standards reference parts of outdated voluntary Australian standards and may not be capturing improved knowledge around safety requirements
- we are considering trusted international standards as ways for suppliers to demonstrate compliance
- we are considering safety principles rather than prescriptive requirements.

This consultation paper considers the following policy options:

- Option 1 Retain the current mandatory safety standards
- Option 2 Adopt parts of the updated voluntary Australian standards
- Option 3 Allow compliance with the voluntary Australian or trusted international standards
- Option 3a Principles-based mandatory safety standard
- Option 4 Revoke the mandatory safety standards

### 3. Background

The toy market is continually changing because of globalisation, technological advancements and consumer preferences.<sup>1</sup>

The toy and sporting goods manufacturing industry in Australia is relatively small and is concentrated in New South Wales and Queensland.<sup>2</sup> Imports to Australia are mostly from China (68 per cent)<sup>3</sup> and China is the largest exporter of toys with an estimated 2700 businesses in the toy-manufacturing sector.<sup>4</sup> For the year 2015-16, the Australian import market was valued at \$2.2 billion.<sup>5</sup>

The retail market for toys and games in Australia includes an estimated 1160 businesses. These products are sold in a variety of retail outlets, such as specialist toy stores, large chain retail stores and, increasingly, online. The major players in online retailing are Toys "R" Us (Australia) Pty Ltd, Wesfarmers Limited (Kmart and Target) and Woolworths Limited (Big W).<sup>6</sup>

### 4. Deaths and injuries

Young children, particularly under 36 months of age, have not yet fully developed their reflexes to cough out small items, which they may place in their mouth. They are therefore especially vulnerable to ingesting and inhaling small parts of toys.

Since 2002, there have been four toy-related deaths in Australia. Three of these cases were the result of choking on small parts of toys.<sup>7</sup> In 2002, two six-year-old boys died after one boy choked on a small plastic board game piece and the other boy fired a dart gun into his mouth, and the rubber projectile with a suction cap tip lodged in his throat, blocking his airway.<sup>8</sup> The third case in 2003 involved a 13-month-old boy who choked on a small toy building block after it lodged in his throat.<sup>9</sup>

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<sup>1</sup> IBISWorld 2016, IBISWorld Melbourne, Victoria, viewed 17 June 2016  
[//clients1.ibisworld.com.au/reports/au/industry/productsandmarkets.aspx?entid=294](http://clients1.ibisworld.com.au/reports/au/industry/productsandmarkets.aspx?entid=294)

<sup>2</sup> ibid

<sup>3</sup> ibid

<sup>4</sup> European Commission, 2015, Brussels, viewed 17 June 2016, [europa.eu/rapid/press-release\\_MEMO-08-364\\_en.htm?locale=en](http://europa.eu/rapid/press-release_MEMO-08-364_en.htm?locale=en)

<sup>5</sup> ibid

<sup>6</sup> IBISWorld 2016, IBISWorld Melbourne, Victoria, viewed 17 June 2016  
[clients1.ibisworld.com.au/reports/au/industry/majorcompanies.aspx?entid=4169#MP69](http://clients1.ibisworld.com.au/reports/au/industry/majorcompanies.aspx?entid=4169#MP69)

<sup>7</sup> The ACCC reviewed confidential data from the National Coronial Information System (NCIS) ([www.ncis.org.au](http://www.ncis.org.au)). There may be deaths that we did not identify due to either missing data or because cases were still open.

<sup>8</sup> ibid

<sup>9</sup> ibid

In 2011, a one-year-old boy died after ingesting multiple small, high-powered magnets, which perforated his small intestine causing infection.<sup>10</sup> Authorities could not identify the exact product involved but it was likely to have been a small ball-bearing type of novelty toy consisting of a number of magnets joined together.

A check of the National Coronial Information System database does not reveal any infant and child toy-related deaths in Australia since 2011.<sup>11</sup>

According to data collected by the Queensland Injury Surveillance Unit (QISU) from approximately 29 emergency departments across Queensland, there were 2126 toy-related injuries in children up to 36 months of age during the period 1999 to 2012.<sup>12</sup> Child injuries related to small parts of toys were higher (93 out of 2126) compared to projectile toys (5), toy magnet sets (4) and aquatic toys (4), which were low.<sup>13</sup> The mechanism of these toy-related injuries varied but ingestion accounted for 118 cases and 53 cases were because of choking.<sup>14</sup> The toys associated with these injuries were unspecified. The hazards associated with small parts of toys still occur in Australia.

For the period 2003 to 2007, the US Consumer Product Safety Commission's National Electronic Injury Surveillance System recorded 104 toy-related child deaths and 49 of those were due to choking or aspiration.<sup>15</sup> In 2008, the Consumer Safety Specification for Toy Safety became mandatory in the US. During the period 2010 to 2014, there were 71 toy-related child deaths in the US, 31 of these were due to choking or aspiration.<sup>16</sup> The decrease in the number of deaths is likely to be associated with the safety requirements for children's toys being made mandatory.

These data on child injuries associated with toys confirms that safety hazards still exist, particularly from small parts.

## 5. The current safety standards

Children's toys in Australia are subject to five mandatory safety standards to reduce the risk of serious injuries and support consumer confidence in the toy industry. Table 2 outlines the hazards addressed by each mandatory safety standard and the corresponding voluntary Australian standard test requirements it references.

**Table 2: Mandatory safety standards and voluntary Australian standards**

Mandatory safety standards	Hazards addressed	Requirements/tests	Voluntary Australian standards
Toys for children up to and including 36 months of age	Choking on small parts	5.2 Small parts test  5.3 Test for shape and size  A2.3 Security of small battery compartment	AS/NZS ISO 8124.1:2002

<sup>10</sup> *ibid*

<sup>11</sup> *ibid*

<sup>12</sup> Queensland Injury Surveillance Unit, *Reference # 1529 Injuries related to toy and nursery products: children aged <36months*, Brisbane, Queensland, 2013.

<sup>13</sup> *ibid*

<sup>15</sup> United States Consumer Product Safety Commission, National Electronic Injury Surveillance System, Bethesda, MD, viewed 17 June 2016, [www.cpsc.gov/en/Research--Statistics/NEISS-Injury-Data/](http://www.cpsc.gov/en/Research--Statistics/NEISS-Injury-Data/)

<sup>16</sup> *ibid*

<b>Mandatory safety standards</b>	<b>Hazards addressed</b>	<b>Requirements/tests</b>	<b>Voluntary Australian standards</b>
Children's projectile toys	Serious eye injuries, choking on small projectiles and flesh wounds	5.2 Small parts test  5.15 Kinetic energy of projectiles, bows and arrows  5.24.5 Torque test  5.24.6.4 Tension test for protective components	AS/NZS ISO 8124.1:2002 and AS/NZS ISO 8124.1:2002/Amdt:2007
Children's toys containing magnets	Ingestion of hazardous magnets	5.24.2 Drop test 5.24.3 Tip-over test 5.24.5 Torque test 5.24.6.1 Tension test 5.24.7 Compression test 5.25 Determination of magnetic flux index C.2.19 Warning statement	AS/NZS ISO 8124.1:2002 and AS/NZS ISO 8124.1:2002/Amdt2:2009
Flotation and aquatic toys	Drowning when unsupervised	C.2.6 Aquatic toys – labelling	AS/NZS ISO 8124.1:2002
Lead and other elements in children's toys	Exposure to unacceptable levels of heavy metals	4 Maximum acceptable element migration from toy materials  4.4 Limits for migration of certain elements from finger paints	AS/NZS ISO 8124.3:2003 and AS 8124.7:2003

We provide further information on the scope and rationale of each mandatory safety standard in this review below.

### **Toys for children up to and including 36 months of age**

This mandatory safety standard came into effect in December 2003 to reduce the likelihood of small parts coming off toys during play or after reasonable wear and tear, thereby helping to prevent choking, suffocation, or death. It mandates sections of the voluntary Australian standard for children's toys (AS/NZS ISO 8124.1:2002) and specifies requirements for design, construction and testing methods.

The types of toys captured include:

- rattles, toy dummies, teething toys, and squeeze toys
- toys for attaching to cots, playpens, prams and strollers
- push and pull toys
- pounding toys
- blocks and stacking toys
- bath toys

- rocking, spring and stick horses and figures
- musical chime toys
- jack-in-the box
- stuffed, plush and flocked animals and figures
- dolls
- toys with pompoms
- games and puzzles
- toy cars, trucks and other vehicles.

### **Children’s projectile toys**

The mandatory safety standard for projectile toys came into effect in December 2010 to reduce the risk of serious facial and eye injuries and choking, when children are playing with projectile toys, such as guns and bow-and-arrow sets. It mandates sections of the voluntary Australian standard (AS/NZS ISO 8124.1:2002 and AS/NZS ISO 8124.1:2002/Amdt1:2007) and specifies requirements for design, construction, testing, instructions and labelling.

### **Children’s toys containing magnets**

The mandatory safety standard for children’s toys containing magnets came into effect in July 2010 in response to severe injuries and the death of a child in the US after swallowing several small, high-powered magnets released from toys. When children ingest multiple strong magnets, they can adhere to each other through the walls of the intestine, causing perforations, infection and blockages.

Sections of the voluntary Australian standards (AS/NZS ISO 8124.1:2002 and AS/NZS ISO 8124.1:2002/Amdt2:2009) are mandated in the mandatory safety standard with some variations. The requirements include warning labels for packaging, and instructions to prevent serious injury that can result if children swallow hazardous magnets.

In 2012, after the 2011-death of the one-year-old who swallowed multiple small, high-powered magnets, the Minister imposed a permanent ban on small, high-powered magnets that are loose or separable. The national ban applies to magnets that:

- are small enough to fit into the small parts cylinder
- have a magnetic flux greater than 50 (kG)<sup>2</sup>mm<sup>2</sup>
- are marketed as a toy, game or puzzle, a construction or modelling kit, or jewellery to be worn in or around the mouth or nose.

We are not formally reviewing this ban at this time. We welcome information about magnet safety that might apply to the safety of general products that contain or are magnets. However, our current focus is on children’s toys containing magnets.

### **Flotation and aquatic toys**

The mandatory safety standard for flotation toys and aquatic toys came into effect in 2009 to reduce the risk of infants and children drowning if the toy fails or is used incorrectly. It covers toys designed or clearly intended for children up to 14 years of age that are intended to support a child’s weight in water, whether or not the toys are inflatable, worn, or otherwise attached to their body.



The mandatory safety standard uses sections of the voluntary Australian standard AS/NZS ISO 8124.1:2002 ‘Safety of toys - safety aspects related to mechanical and physical properties,’ and requires flotation and aquatic toys to carry the following warning statement:

<p><b>WARNING</b>  <b>AQUATIC TOY</b>  <b>USE ONLY UNDER SUPERVISION</b></p>
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The warning must be in block capitals no less than 6 mm in height, in a colour contrasting with the background, and be indelible.

We are considering whether a less prescriptive, principles-based warning for flotation and aquatic toys could provide the same protection for children while reducing costs for suppliers and aligning our requirements internationally. We propose to specify that the warning statement must be indelible and legible and must alert parents and carers to the hazard and about the action required to prevent the hazard from occurring. We invite comments about the warning for flotation and aquatic toys.

### Lead and other elements in children’s toys

Young children often place toys in their mouth to explore them by sucking, mouthing and chewing on them. Lead and other elements can cause harm when consumed, inhaled or absorbed through the skin. Children’s toys should therefore not contain these elements.

The mandatory safety standard for lead and other elements in children’s toys came into effect in January 2010 and mandates sections of the voluntary Australian standards AS/NZS ISO 8124.3:2003 and AS/NZS ISO 8124.7:2003. It applies to products supplied new for use in play by children who are up to six years old.

### Voluntary Australian standards

The mandatory safety standards for children’s toys specify those sections of the voluntary Australian standards considered reasonably necessary to prevent injuries such as choking, eye injuries, suffocation, drowning and chemical migration.

Currently the mandatory safety standards for children’s toys reference sections of outdated voluntary Australian standards as outlined in Table 3. This makes it hard for toy suppliers to understand their compliance obligations. This may also mean that consumers are not benefitting from safety improvements in the updated voluntary standards.

**Table 3: Current mandatory safety standards and voluntary Australian standards**

<b>Mandatory safety standard</b>	<b>Referenced voluntary Australian standards</b>	<b>Updated voluntary Australian standards</b>
Toys for children up to and including 36 months of age	AS/NZS ISO 8124.1:2002	AS/NZS ISO 8124.1:2016
Children’s projectile toys	AS/NZS ISO 8124.1:2002 and AS/NZS ISO 8124.1:2002/Amdt1:2007)	AS/NZS ISO 8124.1:2016
Children’s toys containing magnets	AS/NZS ISO 8124.1:2002 and AS/NZS ISO 8124.1:2002/Amdt2:2009	AS/NZS ISO 8124.1:2016
Flotation and aquatic toys	AS/NZS ISO 8124.1:2002	AS/NZS ISO 8124.1:2016

<b>Mandatory safety standard</b>	<b>Referenced voluntary Australian standards</b>	<b>Updated voluntary Australian standards</b>
Lead and other elements in children's toys	AS/NZS ISO 8124.3:2003 and AS 8124.7:2003	AS/NZS ISO 8124.3:2012/ Amdt1:2016 and AS 8124.7:2003 R2013

## **Battery-operated toys**

Batteries, particularly coin-sized button batteries used in toys, can present a severe injury risk to children when they are accessible. If swallowed, button batteries can lodge inside a child and cause a chemical reaction that can produce severe burns to the oesophagus and other organs.

In Australia, two children have died from button battery related injuries. Each week, an estimated 20 children visit an emergency department with suspected exposure to button batteries. The most serious cases involve 10 cent-sized batteries, but all sizes can be dangerous. Children under five years old are at the greatest risk.

The mandatory safety standard specifies that batteries for toys intended for children under the age of 36 months must not be accessible without the use of a tool or a minimum of two independent movements applied simultaneously to the battery compartment. The mandatory safety standard references the outdated voluntary Australian standard for this requirement.

The updated voluntary Australian standard has removed this requirement for toys intended for children under the age of 36 months because it is included in the voluntary Australian electrical safety standard (AS/NZS 62115:2011 Electric Toys – Safety, based on IEC 62115:2011). We propose to retain the requirement by referencing the relevant parts of AS/NZS 62115:2011 Electric Toys – Safety in any new mandatory safety standard for toys intended for children up to and including 36 months.

The next version of IEC 62115 planned for completion in mid-2017, is likely to require a warning on children's toys containing button or coin cell batteries that draws attention to the hazards if swallowed by a young child.

The US regulation (ASTM F963-16 Standard consumer safety specification for toy safety) already requires toys that operate on button or coin cell batteries to bear the following warning label on the product packaging or on a leaflet packed with the product:

“WARNING this product contains a Button or Coin Cell Battery. A swallowed Button or Coin Cell Battery can cause internal chemical burns in as little as two hours and lead to death. Dispose of used batteries immediately. Keep new and used batteries away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.”

We estimate that it would cost industry approximately \$180 500 to meet a requirement for a warning about button or coin cell batteries in toys for children up to and including 36 months of age (Appendix A provides a detailed explanation of this estimate).

We invite stakeholder views about whether we should mandate a warning statement for toys containing button or coin cell batteries that draws attention to the hazards to young children.

## **6. Compliance**

The ACCC surveys the market to check compliance with the mandatory safety standards for children's toys.

Most recently in 2012, the ACCC and state and territory consumer affairs agencies surveyed over 3300 retailers and 28 wholesalers of children's toys covering 94 374 product lines. The survey covered children's toys captured by three bans and eight mandatory safety standards (including the five mandatory safety standards in this review). The ACCC commissioned more than 1500 performance tests for lead and heavy metals, small parts and projectiles. Overall, compliance was high, with approximately 99 per cent of the product lines inspected complying with the mandatory safety standards.

There were 548 non-compliant product lines resulting in over 11 400 toys removed from sale. The majority of non-compliance was for toys for children up to and including 36 months of age (251), projectile toys (211) and aquatic toys (30).

The results of this survey support the ongoing need for mandatory safety standards for children's toys.

## 7. Standards assessment and comparisons

The international standards for children's toys considered in this review include:

- ASTM D-4236 Standard practice of labelling art materials for chronic health hazards
- ASTM F963-16 Standard consumer safety specification for toy safety
- Code of Federal Regulations in Title 16, Part 1303 – Ban of lead-containing paint and certain consumer products bearing lead-containing paint
- EN 71-1:2014 Safety of toys – Part 1: Mechanical and physical properties
- EN 71-3:2013+A1:2014 Safety of toys – Part 3: Migration of certain elements
- EN 71-7:2014 Safety of toys – Part 7: Finger paints – Requirements and test methods
- ISO 8124.1:2014 Safety of toys Part 1: Safety aspects related to mechanical and physical properties
- ISO 8124.3:2010/Amd1:2014 Safety of toys Part 3: Migration of certain elements
- ISO 8124.7:2015 Safety of toys Part 7: Finger paints – Requirements and test methods
- IEC 62115:2011 Electric toys – Safety.

The ACCC has assessed the US regulations (including the ASTM standard), European, ISO and IEC standards against the following criteria:<sup>17</sup>

- Addressing safety concerns: Is there evidence that the international standard provides an acceptable level of consumer safety?
- Comparable jurisdiction to Australia: Is the international standard published or developed by a legitimate standards body or government agency from an economy or nation with comparable economic and regulatory processes to Australia?
- Applicability to the Australian context: Is the international standard applicable and sufficient in the Australian context?

### US regulations

ASTM International, formerly known as the American Society for Testing and Materials (ASTM), is a US organisation that produces international standards. The US Consumer

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<sup>17</sup> ACCC, International standards for the safety of consumer products - criteria for acceptance, ACCC policy principles, 22 July 2015, [www.productsafety.gov.au/content/index.phtml/itemId/1014180](http://www.productsafety.gov.au/content/index.phtml/itemId/1014180)

Product Safety Commission (CPSC) administers ASTM D-4236, ASTM F963 and 16 CFR § 1303. The Labelling of Hazardous Art Materials Act deems ASTM D-4236 to be a federal regulation under section 3b of the Federal Hazardous Substances Act.<sup>18</sup> Historically, ASTM F963 was a voluntary standard and in 2008, the Consumer Product Safety Improvement Act mandated it as a US national product safety rule.<sup>19</sup>

ASTM F963 specifies a range of safety requirements and test methods for children's toys, including projectile toys, magnets in toys, aquatic toys and heavy element content in toys. These requirements are broadly similar to those specified in the outdated and updated voluntary Australian standards.

The latest version, ASTM F963-16, published in late October 2016, aligns more closely with the ISO and European standards, particularly for toys containing magnets and performance requirements for projectile toys. It also adds new requirements for labelling of toys that contain certain coin-sized button batteries and improved methods for measuring heavy metal content in toys.

### Finger paints

ASTM F463-16 does not specify maximum heavy element migration limits for finger paints. However, the US regulations (16 CFR § 1303) ban toys and other articles intended for use by children up to 12 years of age such as art materials (including finger paints) containing lead above 0.009 per cent.<sup>20</sup> If the finger paint is included in a toy and is intended to be applied to create a finished product that is primarily for play rather than simply being aesthetic in nature, the paint would also have to comply with the maximum heavy element migration limits specified in ASTM F463-16. ASTM D-4236 outlines requirements for precautionary labelling of hazardous art materials (including finger paints) and considers reasonable foreseeable use or misuse.

### Projectile toys

ASTM F963-16 mandates performance requirements to prevent injuries but does not require projectile toys without stored energy to bear a warning against aiming at the eyes or face. This is because of concern that children may be encouraged to act out the behaviour warned against on the label. The voluntary Australian standard, the European standard and the ISO standard all require projectile toys to bear a warning label.

We invite stakeholder views about whether we should continue to mandate the warning on projectile toys that draws attention to the hazards of aiming at the eyes or face.

### Flotation and aquatic toys

The US requirements for aquatic toys are similar to those in the voluntary Australian standard. However, the ASTM F963-16 has less prescriptive labelling requirements, as it does not specify the warning statement to be in block capitals, of a certain height or in a colour contrasting the background. However, the hazard and the action for a parent or carer to prevent the hazard are clear. It also specifies that no advertising copy or graphics with the toy can state or imply that the child will be safe if unsupervised.

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<sup>18</sup> United States Government Publishing Office, NW, Washington DC, viewed 10 January 2017, [http://www.ecfr.gov/cgi-bin/text-idx?SID=a3dc6e95f41272b960a4d43b6af0ce51&node=pt16.2.1500&rgn=div5#se16.2.1500\\_114](http://www.ecfr.gov/cgi-bin/text-idx?SID=a3dc6e95f41272b960a4d43b6af0ce51&node=pt16.2.1500&rgn=div5#se16.2.1500_114)

<sup>19</sup> United States Consumer Product Safety Commission, Business and manufacturing - toy safety, Bethesda, MD, viewed 16 June 2016, [www.cpsc.gov/en/Business--Manufacturing/Business-Education/Toy-Safety/](http://www.cpsc.gov/en/Business--Manufacturing/Business-Education/Toy-Safety/)

<sup>20</sup> United States Consumer Product Safety Commission, Bethesda, MD, viewed 10 August 2016, [www.cpsc.gov/business--manufacturing/business-education/business-guidance/art-materials/](http://www.cpsc.gov/business--manufacturing/business-education/business-guidance/art-materials/)

## Conclusion

The US regulations (including the ASTM standards) provide an acceptable level of consumer safety and are appropriate to be included in a policy option allowing compliance with trusted international standards (Table 4).

## **European standards**

The European Committee for Standardization (CEN) developed the European standards for toy safety. CEN is a not-for-profit standards organisation that develops standards for use in Europe. In addition, the European standards for toy safety are harmonised with the Toy Safety Directive 2009/48/EC. The Directive specifies safety requirements that toys must meet and the European standards prescribe the corresponding technical requirements.<sup>21</sup>

### EN 71-1

The European standard (EN 71-1:2014) specifies safety requirements and test methods for mechanical and physical properties of children's toys. This includes projectile toys, toys containing magnets and aquatic toys.

The updated voluntary Australian standard (AS/NZS ISO 8124.1:2016) is based on the current ISO standard (ISO 8124.1:2014) with some variation, and the current ISO standard is largely based on the European standard. While there are some differences in the test methods specified by the European standard to assess hazards for toys for children less than 36 months, it achieves the same intended effect as the voluntary Australian and ISO standards. The requirements in the European standard for projectile toys and toys containing magnets are comparable to those in the voluntary Australian standard.

For aquatic toys, the requirements in the European standard are similar to those specified in the voluntary Australian standard. The main differences are that the warning statement is required on both the toy and its packaging and, like the ASTM standard, no advertising copy or graphics accompanying the toy can state or imply that the child will be safe if unsupervised.

The European standard (EN 71-1:2014) provides an acceptable level of consumer safety.

### Lead and certain elements

The European standard (EN 71-3:2013+A1:2014) for migration of certain elements covers three categories of toy materials: (I) dry, brittle, powder like or pliable; (II) liquid or sticky; and (III) scraped off; and specifies maximum migration limits for 19 elements. The European standard for finger paints (EN 71-7:2014) references EN 71-3 test methods and limits.

The updated voluntary Australian standard (AS/NZS ISO 8124.3:2012/Amdt1:2016) for migration of certain elements is different to the European standard and covers two categories: any toy (except clay/finger paints); and finger paints; and specifies maximum migration limits for eight elements. The migration limits in the voluntary Australian standard are also substantially different to those in the European standard, with a different approach to sample categorisation and test methods.

The European standard (EN 71-3:2013+A1:2014) is more rigorous in its requirements than the updated voluntary Australian standards for migration of certain elements and finger paints, and it provides an acceptable level of consumer safety.

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<sup>21</sup> European Commission, the Toy Safety Directive 2009/48/EC, Brussels, Belgium, viewed 29 August 2016, [ec.europa.eu/growth/sectors/toys/safety/legislation\\_en](http://ec.europa.eu/growth/sectors/toys/safety/legislation_en)

## Conclusion

The European standards are appropriate to be included in a policy option allowing compliance with trusted international standards (Table 4).

## **ISO standards**

The International Organisation for Standardization (ISO) is an independent, non-governmental membership organisation and the world's largest developer of voluntary international standards.

The current ISO standard (ISO 8124.1:2014) is essentially based on both the European standard (EN 71-1:2014) and the ASTM standard (ASTM F463-11). The updated voluntary Australian standard (AS/NZS ISO 8124.1:2016) is based on the ISO standard with some variation. For this reason, the ISO and Australian requirements for toys for children up to and including 36 months of age, projectile toys and toys containing magnets are similar.

The updated voluntary Australian standard for migration of certain elements (AS/NZS ISO 8124.3:2012/Amdt1:2016) reproduces the equivalent ISO standard (ISO 8124.3:2010/Amdt1:2014) with minor variation for Australian and New Zealand conditions.

## Finger paints

The ISO standard for finger paints (ISO 8124.7:2015) references ISO 8124-3 for test methods and migration limits. However, these limits are, in most cases, significantly higher compared to those specified in the voluntary Australian standard for finger paints (AS 8124.7:2003 R2013), thereby allowing a higher limit of element migration. The ACCC is aware that Standards Australia is seeking public comment on updating the voluntary Australian standard for finger paints to align with the ISO standard, except for the migration limits, which are to remain unchanged. For these reasons, the migration limits for finger paints in the ISO standard are not acceptable for Australia.

## Flotation and aquatic toys

The ISO requirements for aquatic toys are similar to those in the voluntary Australian standard. However, the ISO standard has less prescriptive labelling requirements, as it does not specify the warning statement to be in block capitals, of a certain height or in a colour contrasting the background. However, the hazard and the action for a parent or carer to prevent the hazard are clear.

## Conclusion

The ACCC concludes that, except for the element migration limits for finger paints, the ISO standards provide an acceptable level of consumer safety and are appropriate for inclusion in a policy option allowing compliance with trusted international standards (Table 4).

## **IEC standard**

The International Electrotechnical Commission (IEC) is the world's largest developer of international standards for electrical and electronic technologies.<sup>22</sup> The voluntary Australian standard for electric toy safety is based on the IEC standard (IEC 62115:2011). Both standards require that batteries in toys intended for children under three years old are not accessible without the use of a tool unless the battery compartment cover is adequately secure.

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<sup>22</sup> International Electrotechnical Commission 2016, IEC, Geneva Switzerland, viewed 26 October 2016, [www.iec.ch](http://www.iec.ch)

As mentioned earlier, the next version of the IEC standard expected in mid-2017 is likely to require a warning on children's toys containing button or coin cell batteries that draws attention to the hazards if swallowed by a young child.

The relevant sections of the IEC standard provide an acceptable level of consumer safety and are appropriate for inclusion in a policy option allowing compliance with trusted international standards (Table 4).

**Table 4: Summary of accepted international standards**

Current mandatory safety standard	US regulations (including ASTM standards)	ISO standards	European standards	IEC standard
Toys for children up to and including 36 months	✓	✓	✓	✓
Lead and certain elements in children's toys	✓	✓ Except finger paints	✓	N/A
Flotation and aquatic toys	✓	✓	✓	N/A
Children's toys containing magnets	✓	✓	✓	N/A
Children's projectile toys	✓	✓	✓	N/A

## 8. Detailed policy options

### Option 1 – Retain the current mandatory safety standards

#### Description

The mandatory safety standards would remain unchanged, referencing out-of-date voluntary Australian standards with some minor variations. This option is the status quo against which the benefits and costs of the other options are measured.

#### Benefits

Consumers would be afforded the same level of safety they have now. There would be no increase in costs to business.

#### Limitations

Maintaining the status quo would mean that the mandatory safety standards would continue to reference outdated voluntary Australian standards. It is likely to become increasingly difficult for suppliers to arrange testing to outdated voluntary Australian standards.

The improved safety requirements in the updated voluntary standards would remain voluntary for suppliers.

## Net Benefits

We will assess the net benefits of the other policy options against the status quo of retaining the current mandatory safety standards.

## Option 2 – Adopt parts of the updated voluntary Australian standards

### Description

The five mandatory safety standards for toys would be updated to mandate relevant parts of the updated voluntary Australian standards. Table 3 summarises the specific standards.

### Benefits

This would reduce confusion amongst suppliers as the voluntary Australian standards and the mandatory safety standards would align making compliance for business easier.

The industry is familiar with the structure of the voluntary Australian standards so any significant change in the cost of administration and testing would be unlikely.

The significant penalties associated with breaching a mandatory safety standard would also remain accessible to the ACCC and other regulators.

### Limitations

Only adopting the updated voluntary Australian standards would mean importers could not rely on trusted international standards. This is at odds with fostering competition amongst toy suppliers and increasing product choice for consumers in a global marketplace.

The voluntary Australian standards will continue to change and may again become misaligned with the mandatory safety standards.

### Net Benefits

We estimate this option would increase annual cost to industry by approximately \$0.022m (Table 5). Appendix A provides a detailed explanation of the costings.

**Table 5: Option 2 – Regulatory burden and cost offset estimate table**

Average annual regulatory costs (from business as usual)				
Change in costs (\$ million)	Business	Community Organisations	Individuals	Total change in cost
Total, by sector	\$0.022	\$0	\$0	\$0.022



## Option 3 – Allow compliance with the voluntary Australian or trusted international standards

### Description

This option would allow suppliers to comply with the updated voluntary Australian standards or with specified, trusted international standards (see Table 4).

### Benefits

The option to test products for compliance with trusted international standards would likely reduce compliance costs for suppliers.

This option could reduce barriers to market entry and increase competition in the toy industry. Suppliers import most toys into Australia, so allowing them to source and sell toys that comply with trusted international standards could give consumers a greater choice of products and could reduce prices.

As with Option 2, the significant penalties for breach of a mandatory safety standard would remain.

### Limitations

Allowing compliance with multiple voluntary standards could make enforcement of the mandatory safety standards slightly more difficult for regulators.

### Net Benefits

We estimate this option would save industry \$5.899m annually (Table 6). Appendix A provides a detailed explanation of the costings.

**Table 6: Option 3 – Regulatory burden and cost offset estimate table**

Average annual regulatory costs (from business as usual)				
Change in costs (\$ million)	Business	Community Organisations	Individuals	Total change in cost
Total, by sector	-\$5.899	\$0	\$0	-\$5.899

## Option 3a – Principles-based mandatory safety standard

### Description

Option 3a is the same as Option 3, but we would implement it slightly differently. We would merge and amend the five mandatory safety standards to make a single ‘principles-based’ and less prescriptive mandatory safety standard for toys. We would base the principles on those in the European Toy Safety Directive 2009/48/EC as outlined in Appendix B.<sup>23</sup> We would only use those principles that align with the current mandatory safety standards.

The mandatory safety standards would then set out the voluntary Australian and trusted international standards referred to in Option 3 as ‘safe harbours’ (see Table 4 and Appendix

<sup>23</sup> European Union, 2016, EU Law and Publications, Brussels, Belgium, viewed 5 August 2016, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:170:0001:0037:en:PDF>

B). This means that if a supplier sold a toy that met one of the relevant standards, they would be deemed to comply with the corresponding principle in the mandatory safety standard.

## Benefits

A principles-based regulation accommodating well-established voluntary Australian and trusted international standards would be easy for suppliers to understand and substantially less affected by the high rate of change in multiple toy standards. Suppliers could meet the principles by complying with the latest version of any of the relevant standards since the principles would not change.

If the mandatory safety standards were merged into one principles-based regulation, toy suppliers would not need to consult multiple mandatory safety standards to ensure compliance.

Australian regulatory requirements for children’s toys would become harmonised with those of major international markets. This would reduce the compliance burden on suppliers and could increase competition and give consumers more choice.

## Limitations

Some suppliers may argue that principles-based mandatory safety standards provide less clarity and certainty than prescriptive regulation. This may reduce supplier confidence in demonstrating that their products are compliant.

Allowing compliance with multiple voluntary standards could make enforcement of the mandatory safety standard more difficult for regulators. However, this kind of principles-based regulation has operated successfully in Europe, including the United Kingdom, for many years and European and UK enforcement agencies have intervened successfully to ensure toy safety on many occasions in that time.

## Net Benefits

We estimate this option would save industry \$5.899m annually – the same as Option 3 (Table 7). Appendix A provides a detailed explanation of costings.

**Table 7: Option 3a – Regulatory burden and cost offset estimate table**

Average annual regulatory costs (from business as usual)				
Change in costs (\$ million)	Business	Community Organisations	Individuals	Total change in cost
Total, by sector	-\$5.899)	\$0	\$0	-\$5.899)

## Option 4 – Revoke the mandatory safety standards

### Description

Revoking the five mandatory safety standards would allow industry to self-regulate. Self-regulation would allow businesses to produce or import toys to Australia from overseas without needing to meet a specific safety standard.

Suppliers would still need to have regard to the consumer protection provisions of the Australian Consumer Law (ACL). The ACL provides consumers with specific protections for

consumer transactions called statutory consumer guarantees every time they purchase goods or services. One of those guarantees is that goods will be of acceptable quality, meaning they are safe and fit for purpose.

## Benefits

There would be no direct compliance costs for industry under this option. Any barriers to trade resulting from the current mandatory safety standards would be removed, making it easier for businesses to import products to Australia. This may result in lower priced children’s toys and greater product choice for Australian consumers.

## Limitations

Given the deaths and injuries to children associated with the use of toys, removing the five mandatory safety standards is likely to increase the number of serious injuries and deaths to children from toys significantly.

There is a board range of children’s toys available in the Australian marketplace. Revoking the five mandatory safety standards would remove mandatory safety standards to reduce the risk of choking, suffocation, eye injuries, flesh wounds, magnet ingestion, drowning and exposure to unsafe levels of chemicals from toy materials. This could reduce consumer and retailer confidence in the toy industry.

Without mandatory safety standards, suppliers would determine the safety requirements for their products. Some manufacturers may circumvent safety design features and testing to reduce production costs.

## Net Benefits

We estimate this option would save industry \$8.859m annually (Table 8). Appendix A provides a detailed explanation of costings.

**Table 8: Option 4 – Regulatory burden and cost offset estimate table**

Average annual regulatory costs (from business as usual)				
Change in costs (\$ million)	Business	Community Organisations	Individuals	Total change in cost
Total, by sector	-\$8.859	\$0	\$0	-\$8.859

## 9. Preliminary position

The ACCC is currently of the view that Option 3 is likely to provide the greatest net benefit to consumers, suppliers and regulators.

We are also particularly interested to receive stakeholder views on Option 3a, a single principles-based mandatory safety standard for children’s toys.

Stakeholder submission to this consultation will help us refine the estimated costs, benefits and safety outcomes for each option, and to recommend the most appropriate option to the Minister.

## 10. Key questions

1. Do you agree with the issues identified?
2. Are there safety hazards not addressed in this consultation paper?
3. Do you support a principles based warning on flotation and aquatic toys? The warning would be indelible and legible, alert parents and carers to the hazard and identify the action required to prevent the hazard from occurring
4. Should we mandate a warning on toys containing button or coin cell batteries to draw attention to the hazards to young children?
5. Do you agree with our assessment of international standards for children's toys?
6. Do you see any specific issues with accepting compliance with the 2016 version of the ASTM standard?
7. Should the requirement for a warning statement on projectile toys drawing attention to the hazards of aiming at the face and eyes continue to be mandated?
8. Do you agree with our assessment not to accept the element migration limits in the ISO standard for finger paints?
9. Which policy option do you support?
10. What is your view about any competition effect on domestic manufacturers under the proposed options?
11. What are your views on a single principles-based mandatory safety standard for children's toys based on the principles in the European Toy Safety Directive?
12. Are there any other policy options that the ACCC should consider?
13. How much time would suppliers need to transition to a new mandatory safety standard?
14. Do you agree with the ACCC estimates of costs set out in Appendix A? Are there additional costs for your business that have not been included?
15. Do you have any other comments?

## 11. Supplementary - teething necklaces

Teething necklaces are a relatively new product designed and marketed to be worn by an adult and intended for an infant to chew on while being held (Figure 1). Suppliers claim that the main component of these products is food grade silicone.

In 2015 the ACCC commissioned testing of teething necklaces to determine compliance with the requirements in clauses 4.5.1 (squeeze toys, rattles and certain other toys)<sup>24</sup> and 5.3 (test for shape and size) referenced in the mandatory safety standard. The test reports confirmed that the products failed to comply.

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<sup>24</sup> Clause 4.5.1 prescribes specific requirements for squeeze toys, rattles and certain other toys including teething toys. The design of these toys shall be such that no portion is capable of entering or penetrating past the full depth of the cavity test template A when tested in accordance with 5.3. Such toys with nearly spherical, hemispherical, or circular flared ends shall be designed so that such ends are not capable of entering or penetrating past the full depth of the cavity of the supplemental test template B when tested in accordance with 5.3.

**Figure 1: Teething necklace or teething jewellery**



The purpose of the mandatory safety standard and specifically referencing clause 4.5.1 is to reduce the risk of injury or death of a child from choking.

Suppliers of teething necklaces have made a submission to the ACCC seeking an exemption from the requirements in clause 4.5.1 of the voluntary Australian standard referenced in the mandatory safety standard.

The submission proposes that teething necklaces should be exempt for a number of reasons including:

- Teething necklaces are not a toy and therefore are not designed or intended for use in play by an infant.
- Teething necklaces come with a warning to never allow an infant to wear or play with them unsupervised.
- The cords are designed not to break.
- There are no known reports of infant injuries (namely choking) from women's teething necklaces in Australia.

An ACCC review of the market indicates that teething necklaces are made from silicone and other materials such as wood beads and wood beads covered in crochet. The silicone, wood beads or crochet fabric could become detached from the necklace and lodge in the infant's throat posing a choking hazard.

The ACCC is aware of a case involving a nine-month-old baby chewing on her mother's teething necklace with crochet beads, and some of the crochet fabric became detached from one of the beads in the baby's mouth. Although the baby did not choke on the material, it is foreseeable that this could have occurred if the mother failed to notice.

The ACCC is concerned that infants are our most vulnerable population group and therefore their safety is paramount. We seek stakeholder views about teething necklaces.

#### **Teething necklaces – questions**

1. Should teething necklaces and teething jewellery be exempt from the requirements in clause 4.5.1 referenced in the mandatory safety standard?
2. Do teething necklaces and teething jewellery with beads covered in crochet or other fabric pose a serious choking hazard for infants?

## 12. Have your say

The ACCC invites interested parties to provide information and comment on this review.

Consultation is open from 1 February 2017 to 31 March 2017.

The ACCC prefers submissions via the ACCC consultation hub at [consultation.accc.gov.au](http://consultation.accc.gov.au).

Alternatively, email submissions to [productsafety.regulation@acc.gov.au](mailto:productsafety.regulation@acc.gov.au) or via post:

Director  
Standards and Policy  
Consumer Product Safety Branch  
Australian Competition and Consumer Commission  
GPO Box 3131  
CANBERRA ACT 2601

We will publish submissions on the ACCC website at the end of the consultation period.

Please note any information that you believe to be of a confidential nature should be clearly marked or identified as confidential. The ACCC will not disclose the confidential information to third parties, other than advisors or consultants engaged directly by the ACCC, without first providing you with notice of its intention to do so, such as where it is compelled to do so by law.

## 13. Glossary

Term	Definition
<b>European standards</b>	<p>EN 71-1:2014 Safety of toys – Part 1: Mechanical and physical properties</p> <p>EN 71-3:2013+A1:2014 Safety of toys – Part 3: Migration of certain elements</p> <p>EN 71-7:2014 Safety of toys – Part 7: Finger paints – Requirements and test methods</p>
<b>IEC standard</b>	IEC 62115:2011 Electric toys – Safety
<b>ISO standards</b>	<p>ISO 8124.1:2014 Safety of toys Part 1: Safety aspects related to mechanical and physical properties</p> <p>ISO 8124.3:2010/Amd1:2014 Safety of toys Part 3: Migration of certain elements</p> <p>ISO 8124.7:2015 Safety of toys Part 7: Finger paints – Requirements and test methods</p>
<b>Mandatory safety standards</b>	<p><a href="#">Consumer Protection Notice No. 14 of 2003 - Consumer Product Safety Standard: Toys for children up to and including 36 months of age</a></p> <p><a href="#">Consumer Protection Notice No. 16 of 2010 - Consumer Product Safety Standard: Children's projectile toys</a></p> <p><a href="#">Consumer Protection Notice No. 5 of 2010 - Consumer Product Safety Standard: Children's toys containing magnets</a></p> <p><a href="#">Consumer Protection Notice No. 2 of 2009 - Consumer Product Safety Standard: Flotation Toys and Aquatic Toys</a></p> <p><a href="#">Consumer Protection Notice No. 1 of 2009 - Consumer Product Safety Standard: Lead and certain elements in children's toys</a></p>
<b>Outdated voluntary Australian standards</b>	<p>AS/NZS ISO 8124.1:2002 Safety of toys Part 1: Safety aspects related to mechanical and physical properties</p> <p>AS/NZS ISO 8124.3:2003 Safety of toys Part 3: Migration of certain elements</p> <p>AS 8124.7:2003 Safety of toys Part 7: Finger paints – Requirements and test methods</p>
<b>Updated voluntary Australian standards</b>	<p>AS/NZS ISO 8124.1:2016: Safety of toys Part 1: Safety aspects related to mechanical and physical properties (ISO 8124-1:2014, MOD)</p> <p>AS/NZS ISO 8124.3:2012/ Amdt1:2016: Safety of toys Part 3: Migration of certain elements (ISO 8124-3:2010, MOD)</p> <p>AS 8124.7:2003 (Reconfirmed 2013) – Safety of toys – Part 7: Finger paints – Requirements and test methods</p> <p>AS/NZS 62115:2011 Electric Toys – Safety</p>
<b>US regulations</b>	<p>ASTM D-4236 Standard practice of labelling art materials for chronic health hazards</p> <p>ASTM F963-16 Standard consumer safety specification for toy safety</p> <p>Code of Federal Regulations in Title 16, Part 1303 – Ban of lead-containing paint and certain consumer products bearing lead-containing paint</p>

## Appendix A - Estimated costs for business

We have assessed the regulatory cost for each option against the status quo. Costings are based on customs, industry estimates and published data.

	Option 1: Current mandatory standard	Option 2: Update current mandatory standard	Option 3/3a: Allow compliance with international standards/principles-based	Option 4: Revoke the mandatory standard
<b>Number of models</b>	25,000	25,000	25,000	25,000
<b>Number of units (toys)</b>	190,000,000	190,000,000	190,000,000	190,000,000
<b>Number of suppliers</b>	4,500	4,500	4,500	4,500
<b>Models per supplier</b>	5.6	5.6	5.6	5.6
<b>Costs per test</b>				
- <b>Up to 36 months</b>	\$87.50	\$87.50	\$87.50	\$87.50
- <b>Magnets</b>	\$41.67	\$87.50	\$87.50	\$87.50
- <b>Projectile toys</b>	\$66.66	\$87.50	\$87.50	\$87.50
- <b>Aquatic toys</b>	\$87.50	\$87.50	\$87.50	\$87.50
- <b>Chemicals pt 3</b>	\$155.00	\$155.00	\$155.00	\$155.00
- <b>Chemicals pt 7</b>	\$83.33	\$83.33	\$83.33	\$83.33
<b>Breakdown of toy types</b>				
- <b>Up to 36 months</b>	19%	19%	19%	19%
- <b>Magnets</b>	1%	1%	1%	1%
- <b>Projectile toys</b>	2%	2%	2%	2%
- <b>Aquatic toys</b>	1%	1%	1%	1%
- <b>Chemicals</b>	77%	77%	77%	77%
<b>Annual testing cost per testing supplier</b>	\$1,135.48	\$1,140.36	\$1,140.36	\$1,140.36
<b>Hourly labour rate (including overheads)</b>	\$65.45	\$65.45	\$65.45	\$65.45
<b>Admin hours per model</b>	4.1	4.1	4.1	4.1
<b>% of suppliers (re)testing</b>	100%	100%	50%	25%
<b>Testing costs</b>	\$5.110 million	\$5.132 million	\$2.566 million	\$1.283 million
<b>Admin costs</b>	\$6.709 million	\$6.709 million	\$3.354 million	\$1.677 million
<b>Total compliance costs</b>	\$11.819 million	\$11.841 million	\$5.920 million	\$2.960 million
<b>Total status quo costs</b>	\$11.819 million	\$11.819 million	\$11.819 million	\$11.819 million
<b>Change in Burden</b>	\$0.00	+\$0.022 million	-\$5.899 million	-\$8.859 million
<b>% of up to 36 months with button batteries</b>			10%	
<b>Label cost per unit</b>			\$0.05	
<b>Battery labelling costs</b>			\$180 500	



## Assumptions

All assumption made are detailed below and will be reviewed and re-adjusted based on information received from industry and other stakeholders following the consultation period.

1. 25 000 models of toys subject to at least one of the five mandatory standards are imported into Australia each year<sup>25</sup>
2. There are an estimated 4500 suppliers<sup>26</sup>
3. For the purpose of these regulatory estimates it is assumed each supplier sells an equal number of models:  
Models per supplier (5.6) = models imported (25 000) / number of suppliers (4500)
4. All models are tested once per year according to the relevant standard<sup>27</sup>
5. The breakdown of toy models covered by each standard are:<sup>28</sup>
  - Up to 36 months (19 per cent)
  - Magnets (1 per cent)
  - Projectile toys (2 per cent)
  - Aquatic toys (1 per cent)
  - Chemicals (77 per cent)
6. An average of 4.1 hours of labour per model is required for administrative purposes<sup>29</sup>
7. The default hourly cost for labour in Australia is estimated to be \$37.40. This value is scaled up using a multiplier of 1.75 to account for the no-wage labour on costs<sup>30</sup>.  
Therefore labour costs per hour is estimated to be \$65.45
8. The cost of compliance under the current regulation for the purposes of this estimate is considered a business-as-usual (BAU) cost
9. We assume that 25 per cent of suppliers will continue to test to the Australian standards if the mandatory standards are revoked (we assume the remaining 75 per cent choose either to test to other standards or forgo testing altogether)
10. We assume that 50 per cent of suppliers supply into the US or EU (or import products sold by another supplier into those markets) and that their products comply with the relevant international standards. This means these products do not need to be retested under Options 3 and 4
11. There are no significant changes in costs over time (the estimates in the table are per year).
12. We assume that 10 per cent of toys for children up to 36 months contain button batteries
13. We estimate a per-unit labelling cost of \$0.05.<sup>31</sup>

## Notes

The table above contains our estimate of the compliance costs imposed on business by the five options based on the evidence available. However, we are aware of a number of factors which we have not been able to estimate but which may have a significant impact on costs.

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<sup>25</sup> Customs data

<sup>26</sup> *ibid*

<sup>27</sup> Test costs based on quotes provided by a multinational testing laboratory

<sup>28</sup> Proportions based on data provided by a major Australian supplier

<sup>29</sup> Hours of administrative labour based on data provided by a major Australian supplier

<sup>30</sup> Office of Best Practice Regulation, Regulatory burden measurement framework guidance note, July 2014

<sup>31</sup> Based on quotes for flyer printing from online Australian suppliers.

1. We have not estimated the costs or benefits from any change in injury rate.
2. We have assumed that injury rates and costs will be comparable under Options 1-4.
3. There is no data available for estimating the injury rate to be expected from Option 4. However, we note that serious injuries and deaths have been, and continue to be, linked to these products and the current Australian mandatory standards appear to have been successful at reducing the number of incidents. Taking the value of a statistical life to be \$4.3 million,<sup>32</sup> one death per year or a small number of serious injuries would outweigh the increased savings offered by Option 4 compared to Option 3/3a.
4. Some large suppliers may enjoy lower administrative costs because they undertake administrative activities overseas where labour costs are lower. Re-estimating compliance costs using an hourly labour cost of \$17.5033 reduces the cost saving over the status quo offered by Options 3 and 4 to \$3.441 million and the cost saving offered by Option 4 to \$5.173 million. This does not change the relative performance of the options, but it does narrow the savings gap between Option 4 and Options 3 and 3a to \$1.732 million.
5. Options 3 and 3a may reduce regulatory barriers to the entry of international suppliers not currently supplying the Australian market. This could increase competition.
6. Making the regulatory regime simpler and more flexible (Options 2, 3 & 3a), may also offer competition benefits. Changes may lead to a short-term increase in administrative burden as suppliers adjust to the new requirements, but over time may reduce the labour hours needed for administrative tasks. If the administrative burden on smaller firms is larger (because they have less sophisticated internal systems and cannot easily relocate administrative work to lower-cost environments overseas), any reduction in burden could improve the competitiveness of smaller firms, potentially increasing the number of firms able to supply into Australia.
7. We have assumed that compliance costs under the status quo will remain constant in the future. This may not be the case if further changes to the voluntary standards widen the gap between the requirements of the voluntary standards and the current mandatory safety standards. A significant gap could increase compliance costs if suppliers comply with the requirements of the mandatory safety standards and want to comply with a separate set of requirements under the voluntary standards. This higher regulatory burden would not offer any safety benefits, and would increase the net benefit offered by Options 2-4 over Option 1.

Our analysis is restricted to imported toys. We do not expect including domestically manufactured goods would change the result because the domestic manufacturing industry is relatively small and there is no reason to expect domestically manufactured toys to differ significantly from those manufactured internationally. Some Australian manufacturers would probably still benefit from flexibility to comply with international standards because they export to the US or EU.

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<sup>32</sup> Office of Best Practice Regulation, Best practice regulation guidance note value of statistical life, December 2014, [https://www.dpmc.gov.au/sites/default/files/publications/Value\\_of\\_Statistical\\_Life\\_guidance\\_note.pdf](https://www.dpmc.gov.au/sites/default/files/publications/Value_of_Statistical_Life_guidance_note.pdf)

Arguably this is an underestimate for this analysis, because this estimate is based on an adult and injuries/deaths due to children's toys harm much younger consumers

<sup>33</sup> Based on feedback from a major Australian supplier

## Appendix B – Option 3a – Principles-based regulation

Mandatory safety standard	Principles in EU Toy Safety Directive <sup>34</sup>	'Safe harbours' – relevant clauses from:
<p>Toys for children up to and including 36 months</p>	<p>Annex II.I, 4 d) Toys, which are clearly intended for use by children under 36 months, and their component parts and any of their detachable parts must be of such dimensions as to prevent their being swallowed or inhaled. This also applies to other toys which are intended to be put in the mouth, and to their component parts and any of their detachable parts.</p> <p>Annex II.I, 4 c) Toys and their parts must be of such dimensions as to not present a risk of asphyxiation by closing off the flow of air as a result of internal airway obstruction by objects wedged in the mouth or pharynx or lodged over the entrance to the lower airways.</p>	<p>AS/NZS ISO 8124.1:2016: Safety of toys Part 1: Safety aspects related to mechanical and physical properties (ISO 8124-1:2014, MOD)</p> <p>AS/NZS 62115:2011 Electric Toys – Safety</p> <p>ASTM D-4236 Standard practice of labelling art materials for chronic health hazards</p> <p>ASTM F963-16 Standard consumer safety specification for toy safety</p> <p>EN 71-1:2014 Safety of toys – Part 1: Mechanical and physical properties</p> <p>IEC 62115 Electric toys – Safety</p> <p>ISO 8124.1:2014 Safety of toys Part 1: Safety aspects related to mechanical and physical properties</p>
<p>Children's projectile toys</p>	<p>Annex II.I, 2 Accessible edges, protrusions, cords, cables and fastenings on toys must be designed and manufactured in such a way that the risks of physical injury from contact with them are reduced as far as possible.</p> <p>Annex II.I, 4 c) Toys and their parts must be of such dimensions as to not present a risk of asphyxiation by closing off the flow of air as a result of internal airway obstruction by objects wedged in the mouth or pharynx or lodged over the entrance to the lower airways.</p> <p>Annex II.I, 4 d) Toys, which are clearly intended for use by children under 36 months, and their component parts and any of their detachable parts must be of such</p>	<p>AS/NZS ISO 8124.1:2016: Safety of toys Part 1: Safety aspects related to mechanical and physical properties (ISO 8124-1:2014, MOD)</p> <p>ASTM F963-16 Standard consumer safety specification for toy safety</p> <p>EN 71-1:2014 Safety of toys – Part 1: Mechanical and physical properties</p> <p>ISO 8124.1:2014 Safety of toys Part 1: Safety aspects related to mechanical and physical properties</p>

<sup>34</sup> European Union, 2016, EU Law and Publications, Brussels, Belgium, viewed 5 August 2016, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:170:0001:0037:en:PDF>

Mandatory safety standard	Principles in EU Toy Safety Directive <sup>34</sup>	'Safe harbours' – relevant clauses from:
	<p>dimensions as to prevent their being swallowed or inhaled. This also applies to other toys which are intended to be put in the mouth, and to their component parts and any of their detachable parts.</p> <p>Annex II.I, 8</p> <p>The form and composition of projectiles and the kinetic energy they may generate when fired from a toy designed for that purpose must be such that, taking into account the nature of the toy, there is no risk of physical injury to the user or to third parties.</p>	
Children's toys containing magnets	<p>Annex II.I, 4 d)</p> <p>Toys, which are clearly intended for use by children under 36 months, and their component parts and any of their detachable parts must be of such dimensions as to prevent their being swallowed or inhaled. This also applies to other toys, which are intended to be put in the mouth, and to their component parts and any of their detachable parts.</p>	<p>AS/NZS ISO 8124.1:2016: Safety of toys Part 1: Safety aspects related to mechanical and physical properties (ISO 8124-1:2014, MOD)</p> <p>ASTM F963-16 Standard consumer safety specification for toy safety</p> <p>EN 71-1:2014 Safety of toys – Part 1: Mechanical and physical properties</p> <p>ISO 8124.1:2014 Safety of toys Part 1: Safety aspects related to mechanical and physical properties</p>
Flotation and aquatic toys	<p>Annex II.I, 4 d)</p> <p>Toys, which are clearly intended for use by children under 36 months, and their component parts and any of their detachable parts must be of such dimensions as to prevent their being swallowed or inhaled. This also applies to other toys, which are intended to be put in the mouth, and to their component parts and any of their detachable parts.</p> <p>Annex II.I, 5</p> <p>Aquatic toys must be designed and manufactured so as to reduce as far as possible, taking into account the recommended use of the toy, any risk of loss of buoyancy of the toy and loss of support afforded to the child.</p>	<p>AS/NZS ISO 8124.1:2016: Safety of toys Part 1: Safety aspects related to mechanical and physical properties (ISO 8124-1:2014, MOD)</p> <p>ASTM F963-16 Standard consumer safety specification for toy safety</p> <p>EN 71-1:2014 Safety of toys – Part 1: Mechanical and physical properties</p> <p>ISO 8124.1:2014 Safety of toys Part 1: Safety aspects related to mechanical and physical properties</p>
Lead and certain elements in children's	Annex III.I, Toys shall be designed and	AS/NZS ISO 8124.3:2012/ Amdt1:2016: Safety of toys Part

Mandatory safety standard	Principles in EU Toy Safety Directive <sup>34</sup>	'Safe harbours' – relevant clauses from:
toys	<p>manufactured in such a way that there are no risks of adverse effects on human health due to exposure to the chemical substances or mixtures of which the toys are composed or which they contain when the toys are used.</p> <p>Annex III.13 This shall not apply to toys or components of toys, which, due to their accessibility, function, volume or mass, clearly exclude any hazard due to sucking, licking, swallowing or prolonged contact with skin.</p>	<p>3: Migration of certain elements (ISO 8124-3:2010, MOD)</p> <p>AS 8124.7:2003 (Reconfirmed 2013) – Safety of toys – Part 7: Finger paints – Requirements and test methods</p> <p>ASTM D-4236 Standard practice of labelling art materials for chronic health hazards</p> <p>ASTM F963-16 Standard consumer safety specification for toy safety</p> <p>Code of Federal Regulations in Title 16, Part 1303 – Ban of lead-containing paint and certain consumer products bearing lead-containing paint</p> <p>EN 71-3:2013+A1:2014 Safety of toys – Part 3: Migration of certain elements</p> <p>EN 71-7:2014 Safety of toys – Part 7: Finger paints – Requirements and test methods</p> <p>ISO 8124.3:2010/Amd1:2014 Safety of toys Part 3: Migration of certain elements</p> <p>ISO 8124.7:2015 Safety of toys Part 7: Finger paints – Requirements and test methods</p>