



Review of the mandatory safety standard for pedal bicycles

Consultation paper

October 2016



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Disclaimer

The Australian Competition & Consumer Commission (ACCC) has developed this consultation paper to seek the views of stakeholders about the mandatory safety standard for pedal bicycles.

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1. Introduction

The Australian Competition and Consumer Commission (ACCC) has prepared this consultation paper as part of our review of the mandatory safety standard for pedal bicycles.

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 6.

2. The problem and the need for government action

The ACCC is reviewing the mandatory safety standard for pedal bicycles because:

- we want to see if the safety standard is still effective in reducing serious injuries from bicycle product failures (it was introduced in 1979 because of concerns about unsafe bicycles supplied in Australia)
- there have been technological developments in bicycle manufacturing and the current regulatory arrangements may no longer be the best way to address the safety concerns
- the market has changed since the previous review of the mandatory safety standard
- we are considering trusted international standards for bicycles
- we are considering whether mandatory safety requirements for recumbent, one-of-a-kind, folding, tandem, second-hand and hire bicycles are required
- we are considering safety principles rather than prescriptive requirements to ensure bicycles have effective braking and are structurally sound.
- we want to ensure that the mandatory safety standard keeps pace with changes in bicycle technology, bicycle marketing and use.

This consultation paper discusses the following policy options:

Option 1 Retain the current mandatory safety standard (status quo)

Option 2 Adopt the entire updated voluntary Australian standard

Option 3 Adopt parts of the updated voluntary Australian standard

Option 4 Allow compliance with the voluntary Australian or trusted international standards

Option 5 Revoke the mandatory safety standard.

3. Background

3.1. Cycling in Australia

Cycling is a popular activity in Australia. In an average week, 3.6 million people ride a bicycle, either for transport or for recreation.¹ It is estimated that 60 per cent of children cycle regularly.² According to the 2011 Australian Census, 104 000 people rode to work daily, a 15

¹ Australian Bicycle Council, Australian Cycling Participation 2013 , www.onlinepublications.austroads.com.au/items/AP-C91-13

² Australian Bureau of Statistics (2009), Children's Participation in Cultural and Leisure Activities (Catalogue number 4901.0)

per cent increase from the previous census.³ Participation in cycling increased by 46 per cent from 2001 to 2010, with people over 15 years and over averaging at least one bicycle ride per week.⁴ It is anticipated that more Australians will choose to cycle for health, environmental and economic reasons.

3.2. Injuries and deaths related to cycle accidents

In the 30 years from 1983 to 2012, 1607 cyclists were killed, representing 2.7 per cent of Australian road user deaths.⁵ Each year approximately 35 cyclists are killed and 2500 are seriously injured on Australian roads.⁶

In recent decades, the number of cyclist fatalities has been decreasing. However, this trend appears to be slowing. In 2013, there was a spike in fatalities with 50 cyclist deaths on Australian roads.⁷

The proportion of injuries and deaths attributable to bicycle design or failure is unknown, but is likely to be small. Australian National Coroner Information System (NCIS) data indicates that product failure was a contributing factor in seven per cent of deaths associated with bicycles since 2010, representing two to three deaths annually.⁸ Product failures listed in the coronial system are mainly linked to defective or ineffective braking systems.

There is insufficient injury data to establish a link between mechanical failure and injuries.

Outside of injuries that occurred on the road, in 2005 the Queensland Injury Surveillance Unit reported that a quarter of bicycle injuries resulting in emergency department presentations occurred around the home.⁹ For those under 15 years old, 32 per cent of injuries occurred at home and 34 per cent on the road. For those over 15 years old, 54 per cent occurred on the road and nine per cent occurred at home. Most injuries do not involve a motor vehicle but are 'single vehicle' crashes (crashes just involving the bicycle).

3.3. The mandatory safety standard¹⁰

In Australia, the mandatory safety standard currently sets out a minimum level of safety which includes:

- brakes that perform effectively for the front and rear wheels
- steering that functions safely
- reflectors that improve the visibility of the cyclist
- bell to warn pedestrians
- bicycle identification marking
- user guidance about necessary maintenance.

³ Australian Bureau of Statistics (2011), 2011 Census of Population and Housing, Basic Community Profile (Catalogue number 2001.0); Australian Bureau of Statistics (2006), 2006 Census of Housing, Community Profile Series (Catalogue number 2001.0)

⁴ Australian Sports Commission (2010), Participation in Exercise, Recreation and Sport Annual Report 2010, p 27

⁵ Bureau of Infrastructure, Transport and Regional Economics (BITRE), Road deaths Australia 2012 statistical summary, May 2013, www.bitre.gov.au/publications/ongoing/files/RDA_Summary_2012_June.pdf

⁶ Centre for Accident Research and Road Safety–Queensland (CARRS-Q), State of the road–Bicycle safety, May 2011, www.carrsq.qut.edu.au/publications/corporate/bicycle_safety_fs.pdf

⁷ Dept. of Infrastructure and Regional Development – Aust. road deaths database www.bitre.gov.au/statistics/safety/fatal_road_crash_database.aspx

⁸ The ACCC has reviewed confidential data from the National Coroner Information System (NCIS) (www.ncis.org.au)

⁹ Queensland Injury Surveillance Unit, *Injury Bulletin*, 86, April 2005, www.qisu.org.au/ModCoreFilesUploaded/Bulletin_86103.pdf

¹⁰ [Consumer Protection Notice No. 6 of 2004 - Consumer Product Safety Standard: Pedal Bicycles: Safety Requirements](#)

The mandatory safety standard first came into effect in 1979 and was last updated in 2004. It references the 1998 voluntary Australian standard for bicycles (AS/NZS 1927) with some minor variations.

The mandatory safety standard defines bicycles as fully assembled or partially assembled and specifically excludes the following:

- bicycles with a wheel base of less than 640 mm
- bicycles designed, promoted and supplied primarily for use in competition
- power assisted bicycles
- one-of-a-kind bicycles
- folding bicycles
- tandem bicycles
- bicycles showing signs of appreciable wear or second hand bicycles
- recumbent bicycles.

We discuss the safety requirements for these bicycles later in this paper.

3.4. The voluntary Australian standard

The 2010 voluntary Australian standard (AS/NZS 1927:2010) has superseded the 1998 version and introduced new requirements for:

- BMX stunt pegs
- modern handlebar stem systems
- power assisted bicycles with auxiliary power
- improved labelling
- modified front hub retention tests
- clarifying the test method for front fork tests.

These new requirements are absent from the current mandatory safety standard. The 2010 voluntary Australian standard also removed the wet braking and road worthiness tests that are part of the current mandatory safety standard.

3.5. The bicycle market in Australia

The bicycle retail market in Australia is sizeable. It covers department stores, specialist bicycle retailers, sporting goods stores, children's stores and online sellers. There are approximately 1050 specialised retail stores in Australia.¹¹ Competition in this market is moderate, barriers to entry are low, and there are an increasing number of online traders.¹²

Most retailers import bicycles, as there are few manufacturers in Australia.¹³ It is estimated 1.4 million bicycles are imported into Australia every year.¹⁴ According to Bicycle Industries Australia, there are about 400 importers, manufacturers and wholesalers.¹⁵

¹¹ Bicycle Industries Australia, Relative Costs of Doing Business in Australia: Retail trade industry www.pc.gov.au/inquiries/completed/retail-trade/submissions/submissions-test/submission-counter/sub008-retail-trade.pdf

¹² IBISWorld Industry Report OD5492, Bicycle Retailing and Repair in Australia, May 2014

¹³ IBISWorld Industry Report OD5492, Bicycle Retailing and Repair in Australia, May 2014

¹⁴ www.bikeoz.com.au/index.php/news/67-bicycle-sales-hits-new-high-as-children-get-left-behind

The manufacturing sector in Australia is comprised of small workshop operations, primarily producing made to order bicycles that are sold directly to consumers.

3.6. Compliance with the mandatory safety standard

In 2011, the ACCC and State and Territory consumer protection agencies conducted a survey of 435 children’s bicycles in large department stores and independent toy retailers. Only one bicycle was found to be non-compliant.

Since 1998, there have been more than 65 bicycle recalls in Australia. Suppliers initiated most of the recalls. Seventy per cent of bicycle recalls were associated with defective components such as forks or frames fracturing. The recalls were usually bicycles that were in the medium to high price range. Injury data does not demonstrate a link between faulty forks and frames and injuries. Recalls associated with component failure, such as fork or frame fracturing, are usually about component fatigue later in the life of the bicycle following prolonged use. The remaining 30 per cent of recalls were about missing safety components, such as front brakes, reflectors or warning labels.

During the period 1 January 2011 to 1 January 2015, the ACCC received 65 mandatory safety reports associated with bicycles. The most common cause of injury from a bicycle relate to defects in the handlebars (18 per cent) or pedals (14 per cent).

3.7. State and Territory road laws

To be legally used on public streets, all State and Territory road rules require bicycles to have a brake, reflectors and bell. Western Australia has additional requirements (Table 1). The road rules for bicycles do not require brakes to be tested against specific performance requirements; they just need to be effective. The mandatory safety standard addresses this gap by prescribing test methods for brake performance.

Table 1: Comparison of State and Territory road rules for bicycles

		Road rules							
		Brakes		Reflectors				Bell	
		Australia	WA	Australia	WA			Australia & WA	
Requirement		One brake - front or rear	One brake – rear	Rear	Rear	Front	Wheels	Pedals	Bell, horn or similar warning device
Performance		To be effective – no test	To be effective – no test	Red - visible from 50m with low-beam light	Red - visible from 50m with low-beam light	Not red	Yellow – AS 2142 compliant	Yellow – AS 2142 compliant	In working order

¹⁵ Bicycle Industries Australia, Relative Costs of Doing Business in Australia: Retail trade industry

3.8. Technological developments and changes in the marketplace

There have been numerous technological developments in bicycle manufacturing including the growing prevalence of power-assisted bicycles, now available in the Australian market. These products are not currently covered by the mandatory safety standard. Additionally, recumbent, tandem, folding and one-of-a-kind bicycles are also increasing in popularity, but are excluded by the definition of a bicycle in the current mandatory safety standard.

Power assisted bicycles

Power-assisted bicycles with power output not exceeding 200 W

A power-assisted bicycle is similar to a traditional bicycle, except it is fitted with an auxiliary motor or engine that assists the rider with powering the bicycle. These bicycles are currently excluded from the mandatory safety standard but present the same hazards and risks as a traditional bicycle.

Australian road authorities classify power assisted bicycles as not having power exceeding 200 W. These bicycles can be ridden on the footpath and roads without registration, licensing and third party insurance. The NSW Government, Bicycle Industries Australia and the former Retail Cycle Traders Association requested that the ACCC consider including power assisted bicycles in the review of the mandatory safety standard, and they are in the updated voluntary Australian standard.

The ACCC does not have any data on injuries associated with the use of power-assisted bicycles not exceeding 200 W and invites information from stakeholders. The ACCC is considering whether there are good reasons to include power-assisted bicycles not exceeding 200 W in any revised mandatory safety standard.

Pedelecs

Pedelecs are power-assisted bicycles where the rider's pedalling is assisted by an auxiliary electrical motor, where the output is progressively reduced and finally cuts off as the bicycle reaches a speed of 25 km/h, or sooner if the cyclist stops pedalling.¹⁶ Pedelecs have a maximum continuous rated power of 250 W.

In 2012, the Commonwealth Department of Infrastructure and Regional Development exempted pedelecs compliant with the European standard (EN 15194:2009) from the Australian Design Rules. Australian States and Territories have since updated their road rules to recognise pedelecs as bicycles and exempted them from needing motor vehicle registration if they are compliant with the EN standard. The EN standard sets out requirements for electrical components of the bicycles.

The ACCC does not have any data on injuries associated with the use of pedelecs and invites information from stakeholders. The ACCC is considering whether there are good reasons to include pedelecs in any revised mandatory safety standard.

Power assisted bicycles with power output greater than 200 W (excluding pedelecs)

Bicycles with motor power output exceeding 200 W, excluding pedelecs, are classified as motor vehicles. Unless registered, these bicycles are illegal to use on Australian roads. For

¹⁶ European Norm EN 15194:2009+A1 Cycles – Electrically power assisted cycles – EPAC Bicycles, clause 1 Scope.

the bicycles to be registered they would need to meet the Australian Design Rules for vehicles. The ACCC is proposing to exclude these bicycles from the revised mandatory safety standard.

There is a separate ban on the supply of miniature motorbikes with inadequate safety features powered by internal combustion engines.¹⁷ Electric powered miniature motorbikes are not within the scope of this ban. Miniature motorbikes are not power assisted bicycles and we do not consider them further in this consultation paper.

Engine kits for bicycles

Engine kits that the consumer can fit on a bicycle are available for purchase in Australia. The NSW Road Traffic Authority expressed concern about these kits and asked us to include them in this review. Kits can be either electric or petrol powered, have power output exceeding 200 W, and allow bicycles to reach speeds more than 60 km/h.

When engine kits with power output exceeding 200 W are fitted on bicycles, the bicycle is classified as a motor vehicle and unless registered (and therefore compliant with Australian Design Rules) are illegal to use on Australian roads. The current voluntary Australian standard and the mandatory safety standard do not set out requirements for engine kits.

The ACCC proposes to exclude engine kits from any revision of the mandatory safety standard.

Other changes in the market

One-of-a-kind, folding, tandem and recumbent bicycles

Cyclists using one-of-a-kind, folding, tandem, and recumbent bicycles face the same risks if the product fails as those using other bicycles. The current mandatory safety standard excludes these bicycles.

The ACCC does not have any data on injuries associated with the use of one-of-a-kind, folding, tandem, and recumbent bicycles and invites information from stakeholders. The ACCC is considering whether there are good reasons to regulate the supply of these bicycles in Options 3 and 4 of this consultation paper.

Second-hand and hire bicycles

The current mandatory safety standard does not apply to second-hand and hire bicycles. ACCC recalls data shows that there are cases of product failure associated with component fatigue later in the life of bicycles. This presents an injury risk to consumers purchasing second-hand bicycles.

Cyclists face the same risks if the product fails or lacks safety information whether the bicycle is new or second hand.

The ACCC does not have any data on injuries associated with the use of second-hand bicycles and invites information from stakeholders. Options 3 and 4 of this consultation paper consider whether there are good reasons to include second-hand bicycles in a mandatory safety standard.

¹⁷ [Consumer Protection Notice No. 24 of 2011](#)

Competition bicycles

The current mandatory safety standard excludes bicycles designed for specific competitive purposes such as BMX competitions or racing. Competition bicycles are not suited for roads or heavy traffic, as they often don't come with safety features like brakes or reflectors.

Cyclists riding competition bikes on roads would be breaching State and Territory road rules. The ACCC does not have any data on the prevalence of cyclists using competition bikes for general road use and we do not have injury data that suggests that this is a problem. However, we invite information from stakeholders about the use of competition bikes.

Bicycles that have multi-purpose functions designed and intended for use on roads and in competition are already included in the current mandatory safety standard. We propose to continue regulating the supply of those bicycles.

At this stage, we propose that bicycles designed, promoted and supplied exclusively for competition use remain excluded from any revised mandatory safety standard.

However, some consumers could be confused about whether they can ride competition bikes on the road and this could influence purchasing decisions. One way to address this would be to require these bicycles to be supplied with a warning that the bicycle is not suitable for general road use. A possible warning (or words to the same effect) could be:

“WARNING: competition bicycle—not suitable for general road use”.

3.9. International standards

The ACCC uses the following criteria when assessing whether international standards are appropriate for use in product safety standards in Australia:¹⁸

- 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?

Table 2 lists the international standards that we have assessed against the above criteria.

¹⁸ 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

Table 2: Standards by region

Region	Standard
Australian	AS/NZS 1927:2010 Pedal bicycles—Safety requirements
USA	16 CFR Ch. II (1-1-12 Edition) Part 1512—Requirements for bicycles
International	ISO 4210:2014 Cycles—Safety requirements for bicycles, parts 1-9
	ISO 8098:2002 Cycles—Safety requirements for bicycles for young children
European	EN 14764:2006 City and trekking bicycles—Safety requirements and test methods
	EN 14781:2006 Racing bicycles—Safety requirements and test methods
	EN 14766:2006 Mountain bicycles—Safety requirements and test methods
	EN 16054:2012 BMX bicycles—Safety requirements and test methods
	EN 14765:2005 Bicycles for young children—Safety requirements and test methods

United States CPSC Standard

The United States Consumer Product Safety Commission (CPSC) is an independent agency of the United States government. The CPSC regulates the sale and manufacture of consumer products, and is a reputable standards development body. The United States is a jurisdiction with comparable economic and regulatory processes to Australia.

The CPSC standard broadly has similar requirements to the updated voluntary Australian standard in terms of steering, brakes, reflectors and markings. The standard does not have a requirement for a warning device and the hand brake levers are on the opposite side to the updated voluntary Australian standard (right hand for rear and left hand for front). The CPSC standard allows small bicycles with a seat height less than 635 mm to have no reflectors.

The Australian road rules require bicycles to be fitted with reflectors and a warning device. Hand brake levers also need to be on the appropriate side for Australian roads.

Bicycles designed to the CPSC standard would therefore only be appropriate for Australia if suppliers modify them to meet the Australian road rules by adding warning devices, reflectors and switching the sides of the hand brake levers. These changes are relatively inexpensive and do not require structural changes to the bicycle or performance testing.

Provided the mandatory safety standard required suppliers to make changes to the brake levers, warning device and reflectors, we consider the CPSC standard as a suitable method to address the structural and performance requirements for bicycles in Australia.

ISO Standards

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

The ISO bicycle standards have broadly similar requirements to the updated voluntary Australian standard in terms of steering, brakes, reflectors and markings. The ISO standard

for young children does not require reflectors or a warning device whereas the Australian road rules require these.

Bicycles for young children designed to the ISO standards would therefore only be appropriate for Australia if suppliers add warning devices and reflectors. These changes are relatively inexpensive and do not require structural changes to the bicycle or performance testing.

Provided a mandatory safety standard required suppliers to make changes to add a warning device and reflectors, we consider the ISO standards as suitable methods to address the structural and performance requirements for bicycles in Australia.

European Standards

The European Committee for Standardization (CEN) developed the European standard. CEN develops standards for use in Europe. CEN is a reputable standards development body and the Europe is a jurisdiction with comparable economic and regulatory processes to Australia.

The European standards have broadly similar requirements to the updated voluntary Australian standard in terms of steering, brakes and markings. There are no specific requirements for reflectors but where fitted they must comply with the requirements of the country the bicycle is marketed in. The Australian road rules require bicycles to have reflectors.

Bicycles designed to the European standards would therefore only be appropriate for Australia if suppliers add reflectors. These changes are relatively inexpensive and do not require structural changes to the bicycle or performance testing.

Provided a mandatory safety standard required suppliers to add reflectors, we consider the European standards as suitable methods to address the structural and performance requirements for bicycles in Australia.

4. Policy options

Option 1 – Retain the current mandatory safety standard (status quo)

Description

The mandatory safety standard would remain unchanged, referencing the 1998 voluntary Australian standard 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 have the same level of protection they have now. There would be no increase in costs to business and the high level of compliance is likely to remain unchanged.

Limitations

Maintaining the status quo would mean that the mandatory safety standard would remain out-of-date with new bicycle technology. Consumers could miss the opportunity for potential safety improvements from modern voluntary bicycle standards and suppliers would miss the chance to supply bicycles that comply with those new standards.

Net benefits

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

Option 2 – Adopt the entire updated voluntary Australian standard

Description

The mandatory safety standard would reference the entire updated voluntary Australian standard. This option is the most similar to the current mandatory safety standard, which references all of AS/NZ 1927:1998.

Benefits

The mandatory safety standard would align with the updated voluntary Australian standard and would pick up all of the new safety requirements. This is likely to give consumers a higher level of safety and make it easier for suppliers to comply.

The industry is familiar with the structure of the standard so there is unlikely to be any change in the cost of administration and testing. Compliance is also likely to remain high for this reason. Power-assisted bicycles with an output not exceeding 200 W would be required to comply with the amended mandatory safety standard. It is likely most of these bicycles already comply with the updated voluntary Australian standard and compliance costs for these products are likely to be low.

Limitations

The mandatory safety standard would continue to exclude one-of-a-kind, tandem, hire/rental, second-hand, folding, recumbent bicycles, and pedelecs. As these bicycles are becoming more popular, where they do not have safety features there is a risk of preventable injuries or deaths.

If the updated voluntary Australian standard is adopted in the mandatory safety standard, it will be at least seven years old when it comes into full effect. The voluntary Australian standard was drafted to ensure broad consistency with the International Standard for pedal bicycles (ISO 4210:1996).

In 2014, an updated version of ISO 4210 was published. This will prompt the Standards Australia technical committee to consider whether a revision of the voluntary Australian standard is now required. If a new voluntary Australian standard is released, another review of the mandatory safety standard is likely to be needed within two or three years with consequential costs to industry and government.

The ACCC review of other bicycle standards – the International Standards Organisation (ISO) standards, European norms (EN) and the US regulations (CFR) - suggests that these standards specify similar, and in some cases superior, safety requirements in comparison to the voluntary Australian standard. To continue to base regulations solely on the voluntary Australian standard imposes additional regulatory burden on importers where there does not appear to be good reason to do so.

Net benefits

The ACCC estimates an increased cost of approximately \$0.1 m annually to industry (Table 3). Appendix B provides a detailed explanation of the costings.

Table 3: Option 2 - Average annual saving for industry

Average annual regulatory costs (from business as usual)				
Change in costs (\$ million)	Business	Community Organisations	Individuals	Total change in cost
Total, by sector	\$0.1	\$0	\$0	\$0.1

Option 3 - Adopt parts of the updated voluntary Australian standard

Description

The mandatory safety standard would reference the basic safety feature sections of the updated voluntary Australian standard. A table of the sections that would be mandated is provided at Appendix A.

Benefits

This option provides that one-of-a-kind, tandem, hire/rental, second-hand, recumbent and folding bicycles, pedelecs and power-assisted bicycles with power output not exceeding 200 W, would need to meet the new mandatory safety standard. Where these bicycles do not currently have the minimum safety features, their inclusion may reduce the likelihood of death or injury.

The impact of this change on the costs of compliance, testing and administration for suppliers is uncertain. While simplifying the mandatory safety standard may make construction and testing cheaper, it is unlikely to be substantial. Some suppliers may continue to comply with the entire standard voluntarily. For either of these scenarios it is likely that the high level of compliance will continue under this option.

Limitations

This option poses fewer requirements on suppliers than the current mandatory safety standard. Given the clauses related to basic safety would still be mandated, it is unlikely this will have any effect on injury and death.

There may be modest costs to suppliers of one-of-a-kind, tandem, folding, recumbent and second-hand bicycles in meeting the new mandatory safety standard. We understand that most bicycles already comply and, secondly, any necessary modifications should be straightforward—fitting the bicycle with a bell, reflectors, brakes, identification markings or basic user guidance. Suppliers would not need to test these requirements to ensure compliance.

As mentioned at Option 2, the updated voluntary Australian standard may be deemed now out-of-date and requiring review. This would require a subsequent review of the mandatory safety standard, presenting resource and cost implications for industry and government.

Suppliers may need to check bicycles that already meet trusted international standards against the new mandatory safety standard despite satisfying similar requirements.

Net benefits

The ACCC estimates that this option would save industry \$0.3 m annually (Table 4). Appendix B provides a detailed explanation of the costings.

Table 4: Option 3 - Average annual saving for industry

Average annual regulatory costs (from business as usual)				
Change in costs (\$ million)	Business	Community Organisations	Individuals	Total change in cost
Total, by sector	-\$0.3	\$0	\$0	-\$0.3

Option 4 – Allow compliance with the voluntary Australian or trusted international standards

Description

This option would involve a mandatory safety standard that lists high-level principles that all bicycles are required to meet. The principles would require that bicycles:

- meet the State and Territory road rules (have reflectors and a warning device)
- have effective braking
- be structurally sound.

It would then set out the voluntary Australian and international standards assessed in this paper as 'safe harbours'. This means that if a supplier sold a bicycle that met one of the standards, they would be deemed to comply with the mandatory safety standard.

Benefits

Bicycles would be supplied with basic safety features that protect cyclists from a range of product failures that may cause injury, and would come with the features required for use on Australian roads. The same safety outcomes predicted in Option 3 are likely with this option.

One-of-a-kind, tandem, hire/rental, second-hand, recumbent and folding bicycles, pedelecs, and power-assisted bicycles with power output not exceeding 200 W would then be required to meet the mandatory safety standard. Bicycles that do not currently have these features would be required to include them to prevent potential injury or death.

Creating a set of broad principles against a list of multiple voluntary standards (including trusted international standards) would reduce the compliance burden on global suppliers. This also means that Australian regulatory requirements for pedal bicycles would become harmonised with those of major international markets. The already high level of compliance in the market is likely to continue under this option.

Following initial adjustment, it is assumed it will become easier for suppliers to comply with the mandatory safety standard and demonstrate compliance. Suppliers would be able to import bicycles that are deemed safe and compliant for other markets without the need for additional testing. Although imported bicycles may still need minor adjustments to ensure compliance with the mandatory safety standard, this would be necessary to ensure compliance with Australian road rules.

This option may result in a greater level of consumer choice as it will be easier for suppliers to import bicycles to Australia.

Limitations

This option, rather than listing specific mandatory requirements, would list safety principles and deem products meeting specified trusted standards to comply with those safety principles. This means significantly less requirements than the current mandatory safety standard that mandates the entirety of AS/NZS 1927:1998 (excluding those sections that only pertain to New Zealand). However, we anticipate that there would be no change to bicycle safety, as bicycles would still require effective braking and to be structurally sound.

As discussed in the previous option, there may be modest cost to suppliers of one-of-a-kind, tandem, folding, recumbent and second-hand bicycles may face costs to satisfy the safety specifications.

Enforcement of the amended mandatory safety standard by the ACCC and State and Territory ACL regulators could potentially be more onerous than the current mandatory safety standard. To address this, suppliers would be required to declare which of the voluntary trusted standards they are meeting in order to demonstrate compliance with the mandatory safety standard. This declaration would need to be available at the point of sale (e.g. on the bicycle, on the sales literature or assembly/use instructions, or on the internet).

Net benefits

We expect this option to result in a saving of \$2.1 m to industry per annum (Table 5). Appendix B provides a detailed explanation of the costings.

Table 5: Option 4 - Average annual saving for industry

Average annual regulatory costs (from business as usual)				
Change in costs (\$ million)	Business	Community Organisations	Individuals	Total change in cost
Total, by sector	-\$2.1	\$0	\$0	-\$2.1

Option 5 - Revoke the mandatory safety standard

Description

Most consumer goods in Australia are not regulated by mandatory safety standards. Revoking the mandatory safety standard would mean suppliers 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.

As the Australian road rules set out minimum requirements for bicycles, if a bicycle is sold that cannot legally be ridden on the road it may be considered unfit for purpose. However, this may not apply to bicycles not designed for road use. For example, the road rules do not set out requirements for effective brakes, just that there are brakes. It also does not have any requirements for structural integrity.

Consumer protections also exist to safeguard against suppliers engaging in conduct that is likely to be misleading or deceptive. Additionally, there are provisions for injury reporting, recalls and product liability. These provisions give suppliers an incentive to ensure that the

goods they supply are safe. The ACCC would still be able to take safety action if needed – for example, through recalls.

Benefits

There would be no direct compliance costs for industry under this option. Any international trade restrictions resulting from the current mandatory safety standard would be removed, making it easier for businesses to import products to Australia. This may result in lower priced bicycles and a wider range of bicycles becoming available to Australian consumers.

Limitations

Without a mandatory safety standard, there may be a rise in the number of bicycles supplied that do not comply with Australian road laws and are illegal to use. This will affect the safety of cyclists and increase road safety enforcement and compliance costs for States and Territories.

The mandatory safety standard corrects a level of information asymmetry. A visual inspection of a bicycle by a consumer does not allow the consumer to determine if structural parts of a bicycle, such as the seat or pillar, would perform safely when used.

The consumer protection provisions of the ACL may not provide sufficient incentives to suppliers to ensure their goods offer an acceptable level of safety. Without a mandatory safety standard, suppliers will determine the safety requirements for their products.

It is assumed that many suppliers, particularly those at the upper price range and with established reputation, will choose to meet the updated voluntary Australian standard or trusted international standards as benchmarks because they are an established means of demonstrating reasonable levels of safety.

However, some suppliers, particularly those supplying bicycles in the lower price range and unbranded products, may be at risk of bypassing a design and testing regime. There is a risk that quality standards may decrease over time and there would be a segmentation of the market between cheap and less safe products and more expensive and safer products. If this happened and such bicycles did not have basic safety features or were subject to increased level of component failure, there will be a risk of increased injury or death. Given cheaper products are more likely to be purchased by consumers from a poorer socioeconomic background, this could leave more vulnerable consumers at risk of injury or death as these products would be more likely to fail.

Net benefits

The ACCC estimates that this option would result in an annual saving of \$3.7 m to industry (Table 6). Appendix B provides a detailed explanation of the costings.

Table 6: Option 5 - Average annual saving for industry

Average annual regulatory costs (from business as usual)				
Change in costs (\$ million)	Business	Community Organisations	Individuals	Total change in cost
Total, by sector	-\$3.7	\$0	\$0	-\$3.7

5. Implementation and evaluation

The ACCC will consider implementation and evaluation of the preferred option after consultation.

6. Key questions

- 1) Do you agree with the issues identified?
- 2) Are there safety hazards not addressed in this consultation paper?
- 3) Do you agree with the ACCC's assessment of international standards?
- 4) Are there any other standards that the ACCC should consider?
- 5) Which policy option do you support?
- 6) Are there any other policy options that the ACCC should consider?
- 7) Should the mandatory safety standard cover pedelecs and power-assisted bicycles with power output not exceeding 200 W?
- 8) Should the mandatory safety standard specify minimum safety features for one-of-a-kind, folding, tandem and recumbent bicycles?
- 9) Should the mandatory safety standard specify minimum safety features for second-hand and hire bicycles?
- 10) Do you support a requirement for competition bicycles to be supplied with a warning that the bicycle is not suitable for general road use?
- 11) Do you agree with the ACCC cost estimates set out in this section? Are there additional costs for your business that have not been included?
- 12) How much time should the ACCC allow for suppliers to transition to a new mandatory safety standard?

7. Have your say

The ACCC invites stakeholders and interested parties to comment on these policy options.

Consultation is open from 12 October 2016 to 9 December 2016.

The ACCC prefers submissions via the ACCC consultation hub at consultation.accc.gov.au.

The ACCC will alert stakeholders and interested parties to the consultation through the Product Safety Australia website www.productsafety.gov.au and www.business.gov.au.

Alternatively, email submissions to 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.

Appendix A-Clauses to mandate in Option 3

AS/NZS 1927:2010 - Clause			Requirement for:	Mandatory	
1	1.5		Bicycle marking requirements		
	1.6	1.6.2	Informative labelling - handlebars misaligned		
		1.6.3	Informative labelling - handlebars misaligned & pedals detached		
		1.6.4	Informative labelling - other partially assembled bicycles		
	1.7		Instructions manual		
2	2.2		Sharp edges		
	2.3		Fasteners		
	2.4		Projections		
	2.5	2.5.1	Control cable ends		
		2.5.2	Control cable abrasion		
	2.6	2.6.1	Ground clearance		
	2.7		Toe clearance		
	2.8	2.8.1	Wheels - hub to frame attachment		
		2.8.2	Wheel clearance		
		2.8.3	Tyres		
	2.9	2.9.1	Chainguards		
		2.9.2	Spoke protection		
	2.10		Drive chain		
	2.11	2.11.1	Pedal specifications		
		2.11.2	Toe clips		
		2.11.3	Sole clips		
	2.12	2.12.1	Handlebar		
		2.12.2	Handlebar ends		
		2.12.3	Handlebar stem connection		
	2.13		Seat pillar		
	2.14	2.14.1	Brake specifications		
		2.14.2	2.14.2.1	Handbrake lever location	
			2.14.2.2	Handbrake lever attachment	
			2.14.2.3	Handbrake grip dimensions	
			2.14.2.4	Pre-travel force	
			2.14.2.5	Brake pad assembly	
			2.14.2.6	Brake adjustment	
2.14.2.7			Attachment of brake assembly		
2.14.2.8			Cantilever brakes		
2.14.3		2.14.3.1	Back-pedal brakes - operating force		
		2.14.3.2	Back-pedal brakes - crank differential		
	2.14.3.3	Independent operation			
	2.14.3.4	Handbrakes and back-pedal brakes in combination			

AS/NZS 1927:2010 - Clause			Requirement for:	Mandatory		
2	2.15	2.15.2	2.15.2.1	Reflector specification		
			2.15.2.2	Rear reflector		
			2.15.2.3	Side reflectors		
			2.15.2.4	Pedal reflectors		
			2.15.2.5	Front reflector		
	2.16			Warning device		
	2.17	2.17.2		Lighting equipment		
3	3.1			Assembly instructions		
	3.2			Seat pillar and seat adjustment		
	3.3			Steering stability		
	3.4	3.4.1			Handbrake performance requirement	
		3.4.2			Back-pedal brake performance requirement	
3.4.3				Braking performance		
4	4.2			Static load on wheel		
	4.3			Front fork		
	4.4			Fork and frame assembly		
	4.5	4.5.1			Handlebar stem	
		4.5.2			Handlebars & clamps	
	4.6			Brake friction pads - heat resistance		
	4.7			Drive chain		
	4.8			Pedal		

Appendix B—Regulatory cost estimates

We have assessed the regulatory costs for each policy option against the status quo. Costings have been based on industry estimated, published data. Any assumptions made are detailed below and will be reviewed and re-adjusted based on information received from industry and other stakeholders following the consultation period.

Assumptions

1. 1.4 million new bicycles are supplied in Australia each year.¹⁹
2. There are an estimated 400 importers, manufacturers and wholesalers (suppliers).²⁰
3. For the purpose of these regulatory estimates it is assumed each supplier sells an equal number of bicycles:
Bicycles per supplier (3 500) = bicycles imported (1.4 m) / number of suppliers (400)
4. It is assumed that each supplier will have a range of 10 different models.
5. Every model is tested once a year at a cost of \$1007.40.²¹
6. 20 000 one-of-a-kind, folding, hire/rental, tandem, recumbent and second hand bicycles are supplied annually.²²
7. 25 000 two wheeled electric vehicles were imported into Australia in 2013/14. 60% of these vehicles are pedelecs and 40 per cent are power assisted bicycles with power output not exceeding 200 W (PABs).²³
8. Based on assumption seven, 15 000 pedelecs are sold annually. It is further assumed that 175 pedelecs are sold per model. This is based on the assumption that there is half the number of pedelecs sold per model as opposed to other bicycles discussed in assumption four.
Total pedelec models (86) = total pedelec (15 000) / pedelec per model (175)
9. Based on assumption seven, 10 000 PABs are sold annually. The estimated number of models has been calculated using the same method as in the previous assumption: Total PABs (57) = total PABs (10 000) / PABs per model (175)
10. We assume that towards the end of the 12 month transition period, 10 per cent of bicycles in retail stores and warehouses will not comply with the new mandatory safety standard. It is further assumed that 75 per cent of these bicycles would be sold at a discount prior to the end of the transition period while the remaining 25 per cent would be retested and/or recalibrated to meet the new mandatory safety standard. The cost of testing to transition to the new mandatory safety standard is included in these estimates. However, the potential loss of sales is not.
11. It is estimated that suppliers would need approximately two hours to arrange testing and any other compliance related administration activities for each bicycle model.
12. It is estimated that 20 minutes would be required to check and/or spec up one-of-a-kind, folding, tandem, recumbent and second hand bicycles to meet “core safety specifications” requirements.

¹⁹ Relative Costs of Doing Business in Australia: Retail Trade Industry – Bicycle Industries Australia Ltd

²⁰ *ibid*

²¹ Average quote taken from two testing laboratories

²² Industry estimate

²³ *ibid*

13. The default hourly cost for labour in Australia is estimated to be \$37.40 and this value is scaled up using a multiplier of 1.75 to account for the no-wage labour on costs²⁴. Therefore labour costs per hour is estimated to be \$65.45
14. Substantive compliance costs are costs incurred to deliver the regulatory outcomes being sought, but do not include any costs a normal business would pay in the absence of regulation²⁵. It usually includes purchase and maintenance costs but also includes costs associated with factories requiring a separate production line or additional assembly or manufacturing processes that cater for safety standard specifications. For bicycles, this would mainly include application of labels, correct configuration assembly of brake levers, and fitment of AS/NZS compliant reflectors. Substantive costs would vary significantly depending on manufacturer's expertise and accessibility to AS/NZS parts. At times, the importer, distributor or retailer may carry out this work. It is assumed that the substantive cost per bicycle is AUD\$2.
15. The cost of compliance under the current regulation for the purposes of this estimate is considered a business-as-usual (BAU) cost. Current compliance costs are:

A	Total suppliers (manufacturers, importers and wholesalers)	400
B	Number of models per business	10
C	Cost of testing	\$1007.40
D	Total cost of testing per business per annum	\$10 074
E	<u>Total testing cost to industry per annum</u>	<u>\$4 029 600</u>
F	Labour costs	\$65.45
G	Administrative hours required per model	2
H	Total admin hours cost per business	\$1309
I	<u>Total admin cost to industry per annum</u>	<u>\$523 600</u>
J	Substantive costs of standard	\$2
K	Total bicycles supplied in Australia per annum	1 400 000
L	<u>Total cost per annum</u>	<u>\$2 800 000</u>
M	<u>Total industry BAU costs per annum (testing costs + admin cost + substantive cost)</u>	<u>\$7 353 200</u>

16. In the case of Option 4, we assume that BAU costs will be halved, as it is likely many suppliers would continue to test to a voluntary international or Australian standard. The total cost estimated at row M has been halved.
17. For Option 1, it is assumed that the increased the scope to cover power assisted bicycles will result in the increased cost of \$100 000.
18. For Option 2, the scope is also increased, but there is a decrease in compliance cost due to fewer provisions of the standards needing to be met. We assume that this will be a saving of 30 per cent less than BAU.
19. For Option 3, the scope is also increased. However, we assume that importers will not need to retest, as they do currently, although some will continue to test. We assume this will be 75 per cent less than BAU.

²⁴ Ibid above n.16

²⁵ Ibid above n.16