

# Toy Safety in the ASEAN and European Union: A Comparative Approach

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The global issue of consumer protection, specifically toys products, has become fundamental part of a fair and effective market place involving regional and international areas. Besides the safety of food and cosmetic products that are often taken into priority, children's toys products are also now becoming a main concern among consumers. By adopting a qualitative approach, the findings of this article show that the development of toy safety in European Union (EU) is advanced compared to Association of South East Asian Nations (ASEAN). There are several improvements in which ASEAN Member States can introduce to develop the existing system and areas for enhancement on the safety of toys. Therefore, this research recommends ASEAN to refer to the EU as a model in improving the toy safety standards in addition to other recommendations. By developing toy safety policies, ASEAN will enhance the protection of children as consumers.

**Key words:** *Toys safety, EU Toy Safety Directive, ASEAN, ISO, EN.*

## Introduction

Eurostat (2017) reported that European Union (EU) has become the biggest importers of toy products in the world with toys worth almost €7.2 billion of world imports in 2016. Over the last ten years, the value of toys imported to the EU has grown by almost 70% with China as the biggest supplier of toys. In addition, recent statistics in several ASEAN Member States (AMS) also shows that there is an increase of export of toy products to the EU and the rest of the world. For instance, in 2016, the export of toys from Thailand reached USD213 million



(ThaiPRnet, 2017), while Vietnam's export of sports equipment and toys was worth USD235.7 million in the first quarter of 2017 (Thanh Nien News, 2017).

Unfortunately, along with the growing of demand, there is also an increase of incidents and accidents associated with children's toy products around the world. Each year, 57,000 reported child injuries were related to children's toys and 35,000 were related to infant or child products in Europe (Eurosafte, 2013). In addition, the European Association for Injury Prevention and Safety Promotion (EUROSAFE) reported that children's toy products are ranked 4<sup>th</sup> in the "*Infant or child products*" involved in child injuries (under 5 years of age) after swing, sliding board, and high chair (Eurosafte, 2013). This figure suggests that there is still much room for improvement on the safety policies of children's toys despite the available legislations.

It is worth noting that, unlike EU, ASEAN has no uniform and/or harmonised legislation, directive, or policy that regulates the safety of children's toys. There is also an absence of comprehensive toy safety legislation within AMS, except for Malaysia, Indonesia and the Philippines (Nottage, 2015). The absence of comprehensive product safety legislations raises concern among consumers on the need to have a solid toy safety directive or policy in ASEAN to ensure the safety of children as consumers are protected, especially when they are at a greater risk of hurting themselves compared to adults.

The objective of this paper is to assess ASEAN approach to toy safety. This paper will analyse EU approach to toy safety in order to propose a way forward for ASEAN. This article also discusses the standards used by EU to assess the safety of toys, namely, ISO 8124 and EN-71.

### **The ASEAN Approach to Toy Safety**

It is worth highlighting that the development of toy safety initiatives in ASEAN is slow. In most AMS, there is no specific agency appointed responsible in observing and administering the consumer products, specifically children's toy products. Even worse, numerous AMS still has no national legislations and regulations for safety standard of children's toys product. Additionally, there is no uniform and/or harmonized legislation to regulate the safety of children's toys among AMS. However, the establishment of ASEAN Committee on Consumer Protection (ACCP) can be taken as an initiative in toy safety approach.

### **ASEAN Committee on Consumer Protection (ACCP)**

The ACCP was established in 2007 by the ASEAN Economic Ministers to serve as the principal point to monitor and implement mechanisms to foster consumer protection and

regional arrangements in the ASEAN Economic Community (ACCP, nd.a). The ACCP members are representatives of consumer protection agencies of AMS. Its goal is to provide a facility or channel for ASEAN consumers to claim or complain for any loss incurred (in respect of any services or goods acquired or purchased) at a minimal cost in a speedy manner that is less burdensome (accp, nd.a). Since its establishment, the intention has been to ensure that consumer protection legislation is in place in all AMS, institutional capacity is strengthened, consumer access to information is enhanced, and mechanisms for consumer redress and recalls are in order (ASEAN Secretariat, 2018).

Nonetheless, as stressed in the Myanmar and Brunei Consumer Protection Report (Consumers International, Country Report: Myanmar, 2011; Brunei, 2011), the stakeholders of both countries proposed that a regional committee as well as special Task Force, or Council, or Working group should be established. The intention of this group would be to address consumer issues related to children in order to protect the rights of children as consumers. The development of regional marketing guidelines should also be taken into consideration because children are used in product promotions and advertisements and aggressive marketing campaigns selling products to children. This situation has led several AMS, which are Brunei and Myanmar, to propose to establish Specific Platform for addressing “children as consumers” at domestic and regional level by:

- i. developing specific programmes or initiatives to address issues related to children being targeted for toy products or marketing or advertising;
- ii. collaborating with experts for research on impact of products on children; and
- iii. developing ASEAN Code of Conduct for marketing to children. (Consumers International, Country Report: Myanmar, 2011; Brunei, 2011).

As stated above, besides no specific agency appointed responsible in observing and administering children's toys product, AMS is also facing serious safety failures involving various consumer goods. The ACCP's on their website also reports a few voluntary and/or mandatory recalls of goods potentially used by babies or children including toys covering recent and old goods (ACCP, nd.b). Thailand's market for instance, due to the safety concerns over a manufacturing defect in a children's toys product, has retrieved such goods several times (ASEAN Secretariat, 2018).

In the matter concerning categories of products such as foods, medical devices and pharmaceuticals, there is indeed a critical need to enact legislation to regulate such products, especially when the consequences of these products' failure are severe (Maruchek, et al, 2011). Not to mention, these kinds of product are essential to sustain and prolong human life and well-being (Maruchek, et al, 2011). Children's toys, however, even though they are not significant to sustain human life, still contribute to the quality of life and improved living

standards favoured by society. Thus, a few AMS, such as, Malaysia, Indonesia and the Philippines have had quite strict legislation regulating products used by infants and children. This public regulation encourages manufacturers to produce safe goods and recall promptly any potentially defective goods. They have further incentives from market forces if they are multinational companies trying to preserve a global reputation.

In addition, following the ratification of ASEAN Economic Community Blueprint 2025, the ASEAN Strategic Action Plan for Consumer Protection (ASAPCP) was established (ASAPCP, nd). The ASAPCP builds upon the ACCP work on consumer protection since its establishment and sets out ASEAN's strategy for consumer policy over the next ten years (2016-2025) (ASAPCP, nd). ASAPCP contains one of the strategic measures to encourage consumer-related matters in ASEAN policies through impact assessment of consumer protection policies and development of knowledge-based policies (ASAPCP, nd).

### **The EU Approach to Toy Safety** ***EU Toy Safety Directive***

To protect the safety of children when dealing with toys, EU has developed Toy Safety Directive. The original Toy Safety Directive 1988 (1998 Directive) was published in 1988. Following recent technological developments in the toy industry, new issues have raised regarding the safety of toys as more toys with new functions, using new materials were introduced to the market. Thus, it became clear that the Directive needed to be updated as well. Hence, the new EU Toy Safety Directive (2009 Directive) was introduced in 2009 to strengthen and update the rules on toy safety, especially in areas such as noise, chemicals, and choking hazards (UL, 2012). Once a Directive is published, all EU member-states must adopt it in legislation (Negev, 2018).

Linda and Margaret (2009) stressed that there were requirements for EU Member States to take fundamental actions to conform to the standards described in the Directive. Additionally, the Directive is a binding instrument which compels them to carry out essential actions in bringing their respective national laws into conformity with the essential requirements of the Directive. Thus, enacting the new regulation as directly applicable and binding upon them. Linda and Margaret (2009) stated that:

*While the Directive is binding law on the Member States of the EU, requiring them to take necessary measures to bring their respective national laws into compliance with the Directive standards, the new Regulation is directly binding on the Member States. This means they are obligated to comply with the standard and enforce it without any implementing legislation or rule at the national level.*

As a result, the Directive of 2009 effectively integrated toy markets and toy safety regulations in the EU and has become a legal document in all member states on 20 January 2011 (European Commission, nd.a). In United Kingdom for instance, the Toy Safety Directive was endorsed into domestic law. The Toys (Safety) Regulations 1995 (1995 Regulations) and Toys (Safety) Regulations 2011 (2011 Regulations) were enacted pursuant to Section 11 of the Consumer Protection Act 1987. Both regulations were derived from European Directives (1998 Directive and 2009 Directive) respectively and was proposed to ensure businesses carry out safety conformity assessment of children's toys by certifying that their products are indeed safe. The 2011 Regulations, which have superseded the 1995 Regulations, place detailed obligations and prohibitions on parties along the supply chain to ensure toy safety and traceability from the manufacturer to consumers are accounted (Department for Business, Energy & Industrial Strategy, 2012).

Toys are regarded to be safe when they satisfy vital safety requirements as scheduled in the Annex of the Toy Safety Directive 2009. Once these toys meet the necessary minimum requirements as imposed, it will be affixed with a 'CE' mark and allowed to circulate within the internal market (Article 3(16) Toy Safety Directive 2009). Nonetheless, the 'CE' mark does not represent a guarantee of quality nor does it indicate prior approval of the toy. It merely shows that the manufacturer declared that it has complied with all relevant EU directives (European Commission, nd.b). In the situation where the children's toys products did not comply with minimum safety requirement, the EU and its member states have the authorities to compel mandatory recalls (Article 42(1) Toy Safety Directive 2009), and companies or importers can negotiate voluntary recalls as necessary (Article 6(6) & (7) Toy Safety Directive, 2009). National authorities can alert consumers to the risks it presents, organize or order its actual and immediate withdrawal, coordinate or order its recall, ban the marketing of an unsafe product and order or organize its destruction in suitable conditions (Article 42(2) Toy Safety Directive 2009). The businesses are under obligation to lodge report to the authorities if they sell hazardous children's toys products and withdraw, stop and/or recall their distribution as well as in certain case, abolish dangerous products from markets (Article 6 (7) Toy Safety Directive 2009).

### **Standards used to assess the safety of toys in European Union**

There are two (2) standards that are used to assess the safety of toys in EU, which are;

- (a) European Standard; and
- (b) International Organisation for Standardization.

## European Standard (EN)

European Standards are documents that have been ratified by one of the three European Standardization Organizations (ESOs), namely, CEN, ETSI and CENELEC. EN-71 is a set of European Product Safety Standards that applies to all toys sold in the EU (CENELEC, nd). All these bodies have been recognized as competent in the area of voluntary technical standardization as for the EU Regulation 1025/2012 (CENELEC, nd).

EN-71 concerns toy safety issues with regards to mechanical and physical properties (EN-71-1), flammability (EN-71-2), specification for migration of certain elements (EN-71-3), experimental sets for chemistry and others goods related to it (EN-71-4), chemical toys (EN-71-5), graphical symbols for age warning labelling (EN-71-6), finger paints (EN-71-7), swings slides and similar activity toys for indoor and/or outdoor family domestic use (EN-71-8) and complex safety requirements (EN-71-9), such as sample preparation and extraction (EN-71-10) and methods of analysis (EN-71-11) (British Standards Institution, 2019).

The European Commission publishes harmonized standards for every Directive (Negev, 2018). For the purpose of children's toys, on 29 June 2013, the European Commission published a 'commission communication in the framework of the implementation of Toy Safety Directive 2009 of the European Parliament and of the Council on the safety of toys' (Official Journal of the European Union, 2013). Thus, compliance with European standards provides presumption of conformity with requirements of Directive 2009 (TÜV SÜD, 2013).

This publication also has made standard such as specification for migration of certain elements (EN-71-3) which includes but not limited to phthalate and lead into harmonised standards. Since 1997, public interest groups and regulatory agencies in Europe have expressed concern regarding the potential adverse health effects of phthalate. These 6 phthalates are di-(2-ethylhexyl) phthalate (DEHP), dibutyl phthalate (DBP), benzyl butyl phthalate (BBP), diisononyl phthalate (DINP), diisodecyl phthalate (DIDP), and n-octyl phthalate (DnOP) (Peter and Mate, 2009). According to Harrison (2010), phthalates or also known as plasticizers signifies a group of chemical compounds that are heavily produced and widely used to make the plastics harder to break and more flexible. Linda and Margaret (2009) added that over time, phthalates are released from those products and are dispersed to the water, soil, air and living things. Some of these phthalates are known to cause reproductive damage in rodents (Swan, 2008). In human studies, exposure to DEHP and DBP metabolites has been associated with behavioral problems in children (Kobrosly et al., 2014) and childhood exposure to DEHP and BBP has been associated with allergic diseases including asthma and eczema (Braun et al., 2013; Zota et al., 2014). However, Chris and James (1999) argue that, based on the scientific evidence, the use of DINP in soft PVC toys and other children's products does not present a significant risk of adverse health effects in

children. Thus, the EU have harmonized requirements regarding phthalates in toys, with each banning three types of phthalate contain more than 0.1% of DEHP, DBP, or BBP (Commission Regulation (EC) No 552/2009). These phthalates used in PVC and other plasticized materials in childcare articles and all toys. A similar ban also applies to the remaining three (3) phthalates in toys that could be put in a small child's mouth (European Commission 2009; 2013).

It is worth noting that apart from phthalate, lead-based toys also receive attention as well. It is reported that painted plastic toys made of Polyvinyl chloride (PVC) materials have been major source of lead poisoning to children worldwide. Most common used material in manufacturing of soft plastic children toys are PVC materials. Lead compounds and cadmium are incorporated in PVC material to enhance its softness, stability, brightness and flexibility, hence making toys more attractive to children (Ghaly et al., 2013; Ismail et al., 2006; Kumar and Pastore, 2007; Livingstone et al., 2014; Yousif and Hasan, 2015).

Certainly, at high level of lead, it will cause many adverse clinical effects in consumers, especially children. It can happen through oral contact when the children put the surface of toys product into their mouth, letting the lead contained within to be transferred into their biological system. Even if the product contains low dosage of lead, repeated action will put the health of the children to risk. This can pose danger to the reproductive organs, immune system, liver, kidneys and cardiovascular system (Bhagwat et al., 2008; Pratinidhi et al., 2014; Tong et al., 2000; Wani et al., 2015) as well as affects the development of the brain and nervous system when the harmful substance enters the blood stream (Shah et al. 2010; Mielke et al. 2010).

Realising the utmost need to protect children's future, the world's largest toy company, Mattel has recalled more than 19 million toys from China for violations of applicable safety standards (Story and Barboza, 2007). Following this recall, the EU modified the 2009 Directive which resulted into new lead limit of 2.0 mg/kg, 0.5 mg/kg and 23 mg/kg for lead in dry, liquid and scraped-off toy material, respectively (Njati and Maguta, 2019). EU Member States are now required to adopt the new lead limit levels into their respective national laws and regulations by 28 October 2018 (EU Council Directive, 2017).

### **International Organisation for Standardization (ISO)**

The ISO is an independent, non-governmental membership organisation and has been recognised as the world's largest developer of voluntary international standards (ISO, nd). As of August 2019, ISO works in 164 different countries in the world (ISO, nd). Although it is not mandatory for EU to adopt such standard (Environmental technology, 2014), still, ISO have dedicated agreements with the European Committee for Standardisation (CEN) and

European Committee for Electrotechnical Standardization (CENELEC) to promote the benefits of the international standards to international trade and markets harmonization (CEN-CENELEC, nd). When it comes to safety of children's toys, the standard applicable is ISO 8124 series. These series are broken up into several parts as discussed below.

ISO 8124-1:(2018) applies to all toys or any product intended for children under 14 years of age. It outlines the adequate criteria for structural features of toys and stipulates the hazards for that age group as well as requirements for proper warnings to be displayed. Whereas, ISO 8124-2: (2014) identifies the categories of flammable materials that are prohibited in all toys, and requirements concerning flammability of certain toys when they are subjected to a minor source of ignition. Meanwhile, ISO 8124-3: (2010) specifies maximum acceptable levels and methods of sampling and extraction prior to analysis for the migration of the eight (8) trace metals/elements of antimony, arsenic, barium, cadmium, chromium, lead, mercury and selenium from toy materials and from parts of toys. ISO 8124-4: (2014) postulates requirements and test methods for indoor and outdoor family domestic use such as swings, slides, and similar activity toys and other products intended to bear the mass of one or more children. ISO 8124-6: (2018) specifies a method for a determination of six (6) phthalates that could potentially adverse human health if they are produced and used in very large quantities in toys and children's products which are made of plastics, textiles, and coatings, and others.

### **The Way Forward for ASEAN**

In the context of ASEAN, the need for reform and improvement in existing children toy safety rules is necessary. The importance of having uniform and/or harmonized legislation, as well as policy to regulate the safety of children's toys among AMS is undeniable. Drastic change is not something that can be expected, still, ASEAN can refer EU as a model in assessing toy safety approach.

Apart from that, in order to keep up with the progress and development in children's toys, AMS needs to cooperate and coordinate their approaches to toy safety with various stakeholders and trade associations. The establishment of Southeast Asia Toy Association (SEATA), for instance, is a worthy initiative to provide all children with access to safe and educative toys through supporting the sustainable growth of the toy sector and be part of a global value chain in advocating the importance of learning through playing (SEATA, nd). Moreover, the fundamental objective is to ensure the maintenance of high safety standards by educating stakeholders including consumers, industry players, and policymakers on the importance of toy safety through inculcating best practises. As a multi-stakeholder coalition of toy industry players in ASEAN countries, SEATA uphold the ISO series as the highest standards of product safety by advocating the recognition and use of global standards in manufacturing toy products. In 2016, SEATA was officially formalized as a non-profit

company (limited by guarantee) registered in Singapore and has continued to serve as a preeminent regional vehicle for stakeholder engagement on issues related to toy safety, standards, harmonization, and trade (SEATA, nd).

Perhaps the best approach that could be taken to overcome the matter of lack of comprehensive legislation on the safety of children's toys within AMS is by exercising a non-treaty harmonisation mechanisms. On this basis, individual AMS with strong political ties and close trade may establish a structure for joint recognition agreements to regulate the safety of children's toys despite there being no other international agreements or formal treaty commitments and implementation through Free Trade Agreements. A (non-treaty) Trans-Tasman Mutual Recognition Arrangement between New Zealand and Australia in 2017 could be taken as example in which now applicable to most consumer goods.

This mechanism is not novel, as the approach has been done before in 2003 in the area of cosmetics regulation when AMS established a framework for mutual recognition agreements by signing the agreement on the ASEAN Harmonized Cosmetics Regulatory Scheme (2003). However, this was envisioned as an interim step towards implementing a harmonised 'ASEAN Cosmetics Directive' regime by 2008. The directive based on the EU's 1976 Cosmetic Directive, has been executed in all AMS since 2013. Therefore, the 'positive harmonisation' initiatives on toy safety regulation is possible, especially when the EU or other bodies have well developed harmonised schemes.

Finally, AMS can also provide funding support to the consumer representation groups through grants. This approach may assist the consumer groups to be able to help in defining priority/future issues that require additional research and contribute to standard-making, as well as apply for grants to survey and educate consumers on any emerging issues.

## **Conclusion**

Toy market is continually changing because of technological advancements, globalisation and consumer preferences. More toys will be created and come with the emerging dangers that require special attention from the regulators. ASEAN has become one of the biggest exporters of toy product in the world and it will continue to develop the largest market in years to come. Therefore, ASEAN should use EU as a model to enhance toy safety development. ASEAN should develop a directive or policy on toy safety. This initiative may be able to provide the facilities for free movement of toy products around the world. What is clear from this research is effective implementation mechanism requires commitment from member states. This is among many reasons why EU able to create harmonise regulatory standards to secure the consumers safety especially children in the future.



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