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Standards for consumers – Update

2019

ISO Committee on consumer policy (COPOLCO)

Foreword

The working group WG 2, *Key areas for consumers*, is a standing committee of ISO/COPOLCO.

It supports members by identifying, monitoring and informing on key standards work of interest to consumers within ISO and IEC.

This report

1. summarizes the latest standardization work identified by the working group
2. points out the specific consumer issues in the work
3. informs on the presence of consumer representative(s)

Key persons are responsible for reporting the specific work collected in this report.

This report is updated up to March 2019.

A special thanks to the Key Persons for their effort in making this annual status available.

We have received no reports for the following areas: mechanical contraceptives, preparations for instructions of use, product safety (horizontal issues), road vehicle safety systems, road transport safety and sustainability, energy services, tourism services, sustainable cocoa, 3D printing.

In some cases, this is because the position of key person is vacant and needs to be filled.

Areas where work is complete have been transferred to the list of published standards.

You can get involved in the work by contacting your National Standards Body or copolco@iso.org.

Questions and comments are welcome at copolco@iso.org.

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1. Consumer warranties and guarantees

1.1 Summary of why this work is important to consumers

Consumers can be frustrated by missing or unclear or unfair guarantees and warranties; when purchases do not function as expected. While effective guarantees can boost customer satisfaction and their lifetime value to a company – a dissatisfied customer may well be lost forever.

Businesses (especially in developing and emerging economies) tend to keep customers guessing about their rights to a repair / refund if a product or service does not perform as intended. Many 'bounce' customers to wholesalers, to manufacturers, to regulators, etc… to even get information about the status of their repairs or refunds. Many jurisdictions offer insufficient information on consumer rights to warranties and guarantees in their consumer protection laws and domestic trade laws. However, with e-commerce's multibillion dollar growth potential and issues with online shopping, consumer rights to warranties and guarantees need to be clear – especially when business is online and cross border.

1.2 Summary of current work of significance

To ensure better satisfaction and clarity in creating effective guarantees and warranties, ISO 22059 has been successfully registered as a Draft International Standard (DIS) on 9 January 2019. Now, the drafts have been made available for members for an 8-week translation period. Members can use this time to translate the DIS and prepare measures such as a national announcement. Afterwards, the 12-week DIS ballot will start on 13 March to 5 June 2019.

The next meeting will be hosted by South Africa (SABS) in July 2019 to discuss all comments received during the DIS ballot. But still no confirmation from SABS.

1.3 Standards work

Committee	**Working draft or standard**	**Consumer representative(s)**	**Any comment; For example any expected ballot**
ISO/PC 303, *Guidelines on consumer warranties and guarantees*	ISO 22059, *Guidelines on consumer warranties and guarantees*	NSBs represented by their local consumer associations and regulators Shahrul Mohd Tahir, Malaysian Association of Standards Users Seah Seng Choon, ESG Sandra Hererra, ICONTEC Takashi Nakakuki, JISC Guillermo Zucal, IRAM Dr Eunsook Moon, KATS Lili Cao, SAC Lisbeth Boloka, SABS	DIS ballot: 13 March 2019 to 5 June 2019

1.4 Relevant links

The latest development of the standard and the meeting schedule can be found here:

ISO PC 303, *Guidelines on consumer warranties and guarantees*
and its workplace and project status (password protected)

1.5 Any concern with the standard development

Less participation from P-Member countries.

Recommended action: Encourage COPOLCO members to upgrade their membership in PC 303 and participate in the upcoming meeting.

Also, still no confirmation from SABS for hosting the PC 303 meeting in South Africa in July 2019.

1.6 Key person

For further information, please contact:

Shahrul Mohd Tahir at the Malaysian Association of Standards Users

2. Cosmetics – Air pollution protection factor (APPF)

2.1 Summary of why this work is important to consumers

There are growing concerns over the effects of air pollution on the human body. The World Health Organization recognizes it as a "major environmental risk to health."[1] Air pollution is from both natural (e.g. pollen, volcanic eruptions, etc) and unnatural sources, particularly human activities (e.g. industrial plants, cars). Primary pollutants come directly from pollution sources (e.g. particles in suspension and gases such as sulfur dioxide or carbon monoxide) and secondary pollutants from chemical reactions between gases (e.g. nitrogen dioxide). Of both primary and secondary pollutants, the most detrimental atmospheric pollutants for health are polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), nitric oxides (nitrogen monoxide and dioxide), fine particles and heavy metals (lead, mercury, cadmium, etc), and cigarette smoke.

Particle pollution, also known as "particulate matter" (PM), refers to the complex mixture of particles suspended in the air, with different sizes, shapes and chemical compositions (gases, heavy metals, carbon, etc). These particles may be either solids or liquid droplets. Certain, like dust or soot are large enough or dark enough to be seen by the naked eye, others are so tiny they can only be detected with advanced technology. Because they are so extremely small (up to twenty times smaller than a pore) and can be inhaled and absorbed, fine particles appear to be the most harmful to humans and are subject to monitoring by authorities and regulations[2]. "Fine particles" are those with a diameter under 10 µm (called PM10) and those with a diameter under 2.5 µm (called PM2.5) are of key concern. PM2.5 includes atmospheric pollutants such as PAHs, VOCs, nitric oxides and heavy metals (lead, mercury, cadmium, etc).

Particles stemming mainly from road traffic or combustion reactions have special physical properties that make them highly reactive to skin tissues and components, where they generate major oxidative stress. This can be either intra- or extracellular. These particles carry organic compounds and metals that are together able to reach the mitochondria. PAHs, in particular, bind together on the PM surface. PAHs are among the most common organic pollutants and come mainly from automobile exhausts (including diesel vehicles), as well as cigarette smoke. On the skin, PAHs may be converted into quinones that produce free radicals and are thought to be the elements behind PM toxicity[3].

The pollutants which constitute our daily, inside and outside environment must be rightly considered as important sources of cutaneous stresses, even if they have been underestimated for a long time. The evolution of our lifestyles and increasing urbanization amplify the risks, making the pollution a major source of concern for health and beauty.[4] Cells, their lipid and protein components but also their DNA, are the targets of pollutants, and generators of oxidation and inflammation. Premature aging, acne, irritable and sensitive skin, atopic dermatitis and eczema, dry skin, redness and itching are some of the consequences related to pollution.[5]

[1] World Health Organization. Ambient (outdoor) air quality and health. May 2, 2018

[2] United States Environmental Protection Agency. Air Pollution: Current and Future Challenges Clean Air Act Overview

[3] Sang Woon Chung, Hae Young Chung, Akira Toriba, Takayuki Kameda, Ning Tang, Ryoichi Kizu. An Environmental Quinoid Polycyclic Aromatic Hydrocarbon, Toxicological Sciences 2006 November 8 95(2), 348–355 (2007)

[4] Briggs, David. Environmental pollution and the global burden of disease. British Medical Bulletin, December 2003, Volume 68, Issue 11 - 24

[5] Puri P, Nandar SK, Kathuria S, Ramesh V. Effects of air pollution on the skin: A review. Indian J Dermatol Venereol Leprol. 2017 Jul-Aug 83(4) 415-423

The tables below illustrate the top 30 Canadian cities with the highest PM2.5 concentration daily maximum on a um/m3 basis in 2016, along with the Air Quality Index and its implications on human health.

As indicated, a rating of 300+ is considered hazardous to health, and just under half of the Canadian cities in the chart have levels above 300, with many of them in the thousands. Although these are indicators for overall health and not specific to skin damage, the significant levels of pollution should be considered, along with the potential effect on skin, the largest human organ.

Table 1: 2016 Air Quality in Canadian Cities

City	P/T	Location	Maximum
Fort McMurray	AB	Timberlea Subdivision	5198
Fort McKay	AB	Syncrude Ue1	3867
Fort McMurray	AB	Franklin Avenue	3261
Anzac	AB	N/A	3182
Fort McKay	AB	Main Street	3152
Wapasu	AB	Located Outside Approval Boundaries At Pti Camp	1238
Fort Chipewyan	AB	Fort Chipewyan	624
Edmonton	AB	Woodcroft	416
Montréal	QC	70 Rue Ontario Est	365
Conklin	AB	1-33-076-08 W4	354
Norman Wells	NT	#7 Forestry Road	321
Cold Lake	AB	15 Avenue	307
St. Albert	AB	37 Sunset Blvd	263
Flin Flon	MB	143 Main Street	246
Fort Saskatchewan	AB	9209a-96 Ave	245
Edmonton	AB	6240 - 113 Street	222
Edmonton	AB	17 Street And 105 Avenue	222
Hinton	AB	Private Road	214
Debolt	AB	Goodwin Road	214
Edmonton	AB	10255-104th Street	200
Beaverlodge	AB	Beaverlodge Research Farm	200
Kitimat	BC	Haulage Road	189
Thompson	MB	48 Thomson Drive N	162
Swift Current	SK	1200 Begg St West	162
Abbotsford	BC	1073 Columbia Street	155
Fort Smith	NT	95 Conibear Cres	154
Castlegar	BC	801 9th Avenue	148
Ardrossan	AB	N/A	146
Mount Pearl	NL	Old Placentia Road	144

Source: World Health Organization Outdoors Air Database

Table 2: Air Quality Index – A Guide to Air Quality and Your Health

AQI	Air Pollution Level	Health Implications	Cautionary Statement (for PM2.5)
0 - 50	Good	Air quality is considered satisfactory, and air pollution poses little or no risk	None
51 -100	Moderate	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.	Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.
101-150	Unhealthy for Sensitive Groups	Members of sensitive groups may experience health effects. The general public is not likely to be affected.	Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.
151-200	Unhealthy	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects	Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion
201-300	Very Unhealthy	Health warnings of emergency conditions. The entire population is more likely to be affected.	Active children and adults, and people with respiratory disease, such as asthma, should avoid all outdoor exertion; everyone else, especially children, should limit outdoor exertion.
300+	Hazardous	Health alert: everyone may experience more serious health effects	Everyone should avoid all outdoor exertion

Source: Canadian Environmental Protection Agency

A variety of skin care products currently available and/or in production claim to effectively protect the skin from the damaging effects of air pollution. However, the performance of air pollution protection substances can vary considerably from one skin care product to another. In fact, the same product can be marketed differently based purely on the sales opportunity, such as in Europe or North America versus Asia.[6] Specifications behind product claims are often vague and inconsistent, causing confusion in the marketplace. With clear and transparent definitions, requirements and testing methodologies established, manufacturers will be better able to validate performance; provide higher quality and safer products; and potentially benefit from cost savings through a more effective process.

In addition, consumers will have a better basis for product comparison and purchase as they depend on the information on product labels, including manufacturers' claims, to make purchasing decisions. This proposal will support the validation of APPF claims on skin care products through standardized testing. This will then enable consumers to make informed purchasing decisions with greater confidence. As well, the ability to validate manufacturers' performance claims as a result of clear requirements and standardized testing will provide data to support informed and transparent policy development. This work will facilitate trade by supporting the alignment of market access requirements and conformity assessment procedures between jurisdictions, such as product category recognition.

In conclusion, environmental pollutants have a tremendous impact on the life quality and health of individuals. There is no doubt that protection from the negative impact of pollutants is important to our bodies as a whole. There have been significant studies of these impacts on internal organs, but despite preliminary work, more research needs to be carried out to determine the full impact of pollution on skin.

[6] Simon Pitman. P&G research stays one step ahead on anti-pollution skin care. Apr 15, 2015

Regardless of research, pollution protection skin care products continue to pop up on the market. Moreover, given the lucrative market value of skin care products, an estimated $190 billion globally by 2023, the development of additional products to protect the skin from the negative impact of pollution is imminent.[7] In one study, market research firm Mintel found a 40% increase in the number of beauty and personal care launches that included an anti-pollution statement, and projected this to continue.[8] In light of this, there is an ever-growing need for proper assays to evaluate the anti-pollution efficacy of these products.[9]

Current research has offered various assays to determine the mechanism of action of the pollutants on living cells and to prove the protective factor of anti-pollution products. In vivo and in vitro assays have various advantages, but also limitations. It is very important that the study design is trustworthy, reproducible, and performed in conditions similar to real conditions.[10] Therefore, combining these two approaches is the best option to provide reliable and trustworthy results, and ultimately to develop standardized tests, similar to those in place for the SPF values, to validate and quantify product efficacy.

2.2 Summary of current work of significance

Standards Council of Canada (SCC) – National outreach to form Mirror Committee to ISO TC 217.

2.3 Standards work

Committee	**Working draft or standard**	**Consumer representative(s)**	**Any comment; For example any expected ballot**
ISO/TC 217, *Cosmetics*	Air Pollution Protection Factor (APPF)	Mr Michael Wong, SCC	BSI (UK) is also looking for someone

2.4 Relevant links

ISO/TC 217, Cosmetics

2.5 Any concern with the standard development

None.

2.6 Key person

Michael Wong at Aqua+ Skincare, Canada

[7] Zion Market Research. Global Cosmetic Skin Care Market Will Reach USD 190.40 Billion by 2023

[8] Mintel. Anti-Pollution Claims on Beauty Products In Asia Pacific Grow By 40% In Two Years. Nov 4, 2014

[9] Euromonitor International. Pollution: A Business Opportunity for Cosmetics Ingredients (Part 2). Aug 3, 2017

[10] Jadwiga Rembiesa, Tautgirdas Ruzgas, Johan Engblom and Anna Holefors. The Impact of Pollution on Skin and Proper Efficacy Testing for Anti-Pollution Claims. *Cosmetics* 2018, *5*(1), 4

3. Elderly and persons with disabilities

3.1 Summary of why this work is important to consumers

Anyone, anytime can suffer a disability in the capacities we usually take for granted; and we are living in increasingly aged societies.

Older persons and persons with disabilities have various difficulties using consumer products due to their limitation of human abilities, i.e. hard of seeing, hard of hearing, limited agility, mobility etc. These problems could be solved by means of standard design that account for special needs and limited abilities.

Better accessibility benefits all consumers through the better design of products and services, which in turn boosts access to, and satisfaction with, the global marketplace. Thus, all consumers benefit from inclusive designs which facilitate, for example, easy opening of packaging; access to buildings; and social participation, such as being able to use the internet or television. Many consumers have similar needs e.g. families with pushchairs benefit from wheelchair access. Ultimately, it can be argued that further accidents can be prevented through good design, and that all of society benefits.

This 'inclusive design' concept is addressed by ISO/IEC Guide 71, *Guide for addressing accessibility in standards*, under the name of 'accessibility' or 'accessible design'. Consumers have been keen on progress in how this guide is being implemented, and how consumer voices are being reflected in the design of everyday products.

The COPOLCO-initiated revision of the guide in 2014 added new information and practices, and reactivated work on developing standards and implementing the concept in industry. Meanwhile new movements have emerged for the well-being of aged people (through better health care services, active ageing etc) both in ISO (a new TC 314 is on ageing societies) and IEC (SyC-AAL on active assisted living) which are expected to be more active in 2019.

ISO/TC 314 seeks to develop standardization to help ageing societies. Consumers may be taking care of older family members or acquaintances or may themselves be ageing or have dementia. How we can provide an inclusive life for these consumers in both their work and their community and in their organization is a critical concern as societies age and baby boomers retire.

3.2 Summary of current work of significance

ISO/TC 314 has had two meetings and is quickly moving its projects forward. These are listed below. There is a strong input from consumers to the work of this committee and its working groups.

3.3 Standards work

Committee	Working draft or standard	Consumer representative(s)	Any comment; For example any expected ballot
ISO/TC 314, *Ageing Societies*		Rae Dulmage and Patrick Harkness, SCC Anne Hastie, BSI	
ISO/TC 314/WG 1, *Ageing workforce*	**ISO/AWI 23617** (Under development) *Ageing societies – guidelines for an inclusive workforce*	Rae Dulmage	This project is at 20.20 – new project registered
ISO/TC 314/WG 2, *Dementia inclusive*	**ISO/AWI 23623** (Under development) *Ageing Societies – Framework for Dementia-inclusive communities*	Rae Dulmage Anne Hastie	This project is at 20.20 – new project registered
ISO/TC 314/WG 3, *Carer inclusive*	**NP 23889**, *Carer-inclusive and accommodating organizations*	TBA	This is just being set up
ISO/TC159, *Ergonomics*		Susan Harker, BSI Ulrike Kuhlmann, Kristina Unverricht, Hilke Groenewold, Hans-Jorg Windberg, DIN	
ISO/TC159/WG2, *Ergonomics for people with special requirements*	**TR 22411 2nd edition** *Ergonomics data for use in the application of ISO/IEC Guide 71:2014*	Susan Harker (BSI)	After the approval and comments resolution resulted in CIB, the TR has been in editorial work for publication
ISO/TC159/SC3/WG4, *Human physical strength, manual handling and force limits*	**AWI 23979,** *Ergonomics — Accessible design — Ease of handling* **PWI,** Measurement of frail (tentative title)		NP was approved in March 2019 Accessibility requirements for physical abilities (strength, reach ranges, etc) in handling and manipulation of objects are specified NP to be proposed
ISO/TC159/SC4/WG10, *Accessible design for consumer products*	**CD 24507,** *Ergonomics — Accessible design — Doors and handles of consumer products*	Susan Harker (BSI)	Accessibility requirements for doors and handles are specified. Due to expiration of the ISO

			time limit, the work item is being changed to TS
	DIS 24509 (renumbered from 21055) *Ergonomics — Accessible design — Minimum legible font size for people at any age*		A method for estimating minimum legible font size is standardized The DIS was approved, and to be proceeded to FDIS in early 2019
	FDIS 24508 (renumbered from 21056) *Ergonomics — Accessible design — Guidelines for designing tactile symbols and characters*		Guidelines on designing tactile symbols and characters are specified The FDIS was approved, and to be published in 2019
	TS 21054, *Ergonomics — Accessible design — Input controls for consumer products*		Accessibility requirements for input controls of consumer products such as ON/OFF buttons and selecting/setting functions are specified (original part 1 and part 2 were combined) The work item is waiting for a next step (CD)
	DIS 24550 (renumbered from 24500-1) *Ergonomics — Accessible design — Indicator lights on consumer products*		Accessibility requirements for indicator lights are specified The DIS ballot is to be completed in April 2019
	DIS 24551(renumbered from 24500-2) *Ergonomics — Accessible design —Spoken instructions for consumer products*		Accessibility requirements for spoken instructions used in consumer products are specified The DIS ballot is to be completed in April 2019
	CD 24552 (renumbered from 24500-3) *Ergonomics — Accessible design — Accessibility of digital information visually displayed on consumer products*		Accessibility requirements for small visual displays used in consumer products is specified The document is being prepared for the DIS ballot
			Accessibility requirements for touch-

	AWI 23444, *Ergonomics – Accessible design – Accessibility guidelines for touch-screen interfaces of consumer products* **PWI/TS,** *Guidelines for description of alternative text for images in consumer products manuals and guides*		screen interfaces are specified NP was approved, and a fifth participation is being sought A new work item on providing text for figures/images in instruction manuals is to be proposed
ISO/TC159/SC5/WG5 *Physical environment for people with special requirements*	**NP 24505-2** *Ergonomics – Accessible design – Method for creating colour combinations Part 2: For people with defective colour vision and low vision* **PWI/24505-3 (to be changed from 24505-4)** *Ergonomics — Accessible design — Method for creating colour combinations Part 3: General guidance on the use of colour combination standards*		A method for colour combinations for people with defective colour vision and low vision is specified (Defective colour vision and low vision are combined) NP ballot is to start in 2019 Methods for using ISO 24505: part 1 and part 2 for the application for different populations is specified
ISO/TC173/SC7, *Accessible design*	**(in preparation)** *Accessible design – Instructions for use of consumer products used by persons with visual impairment*	Joseph Bascou, AFNOR Hans Hammarlund, SIS	A new work item on instruction manuals for persons with visual disabilities will be proposed in TC173/SC7 in 2019
ISO/TC122/WG9, *Accessible design for packaging*	**FDIS/22015** *Packaging — Accessible Design — Handling and manipulation*	Axel Thiele, DIN	Design requirements for handling and manipulation of packages are specified FDIS ballot is to start soon in early 2019
ISO/TC59/SC16, *Accessibility and usability of the built environment*	**ISO 21542 (revision)** *Building construction — Accessibility and usability of the built environment*	Doris Ossberger, ASI	Revision is ongoing
ISO/IEC JTC1/SC35/WG6, User interfaces accessibility	**ISO/IEC 20071-23** *Information Technology — User interface component accessibility — Part 23: Guidance on the visual presentation of audio*	Ca. 29 consumers in JTC 1 working groups	Accessibility requirements for visual presentation of audio information are specified Published in 2018

	information (including captions and subtitles) **ISO/IEC 29138-1** *Information technology — User interface component accessibility — Accessibility considerations for people with disabilities — Part 1: User needs summary* **ISO/IEC FDIS 30071-1** *Information technology — Development of user interface accessibility — Part 1: Code of practice for creating accessible ICT products and services* **ISO/IEC DIS 20071-11** *Information technology — User interface component accessibility — Part 11: Guidance on text alternatives for images*		Published in 2018 (no information) Accessibility requirements for creating alternative text for images are specified
IEC/TC59 WG 11, *Performance of household and similar electrical appliances*	**IEC 63008 ED1,** *Household and similar electrical appliances – Accessibility of controls, doors, lids and handles*		Recommendations on accessibility of controls, doors, lids, and handles of household appliances are specified The work item was in the FDIS stage in 2018
IEC SyC AAL, Active assisted living	**IEC TS 63134 ED1,** *Active Assisted Living (AAL) use cases* **IEC 63168 ED1,** *Cooperative multiple systems in connected home environments – Functional safety of electrical/electronic safety-related systems – AAL aspects*		User requirements in use cases of AAL are specified The DTS is being prepared A CD is being prepared

3.4 Relevant links

ISO/TC 314, Ageing societies

Article by the United Kingdom on dementia-friendly communities in the January 2019 *ISO consumer update*

ISO/TC 173, *Assistive products for persons with disability*
ISO/TC 159, *Ergonomics*
ISO/TC 122, *Packaging*
ISO/IEC JTC 1, *Information technology*
IEC/TC 59, *Performance of household and similar electrical appliances*
IEC SyC AAL, *Active Assistive Living*
ISO/TC59/SC16, *Accessibility and usability of the built environment*

3.5 Information of meetings and consumer participation

Committee	Date of last meeting	Date of next meeting	WG/ Standard(s)	Consumer representative(s) involved in the key area
ISO/TC159/WG2	2018/8/26	2019/9/-	TR22411 2nd ed Part 2	Susan Harker (BSI)
ISO/TC159/SC3/WG4	2019/3/11	-	ISO 23979	
ISO/TC159/SC4/WG10	2018/8/27,29	2019/9/-	ISO TS 24507 ISO 24550, 24551 ISO 24552	Susan Harker (BSI)
ISO/TC122/WG9	2018/11/14	No plan	No item	No plan
IEC/TC59/WG11	(no info)	-	-	-
IEC SyC AAL	(no info)	-	-	-

3.6 Any concern with the standard development

None.

3.7 Key persons

Ken Sagawa at the Japan National Institute of Advanced Industrial Science and Technology

G. Rae Dulmage at Standards Council of Canada

4. Electronic Cigarettes, vape and vapour products

4.1 Summary of why this work is important to consumers

This product is now widely used across the globe. Standardization work is running in parallel at ISO and CEN level. Consumer interests are: safety and health, performance, fitness for purpose and usage. The needs of children are particularly important as regards access to a highly toxic chemical e.g. nicotine. Concerns have been raised regarding the chemicals present or emitted in the e-liquids. There are issues of information (benefit or not of e-cigarettes against tobacco) and protection of the environment. Finally, there are issues around the hardware i.e. the battery and charging unit.

The standards are still being developed – drafts are being considered by each working group.

The European standards are being developed with regard to the applicable legislation: The Tobacco Products Directive 2014/40/EU and the European Regulation (EC) 1272/2008 on classification, labelling and packaging of substances and mixtures.

4.2 Summary of current work of significance

International standardization work is moving slowly and focuses more on testing procedures. There is close cooperation of ISO/TC 126/SC 3 with CEN/TC 437. European work is very slow and behind schedule.

Concerns are that working groups are not producing desired outcomes due to lack of active membership and expertise. All the working groups are heavily populated by industry interest including big global tobacco companies such as BAT, Imperial etc. Regulators are involved in the committees but, for example in the UK, Public Health England is very supportive of the use of e-cigarettes as a much less harmful alternative to tobacco and are actively promoting their use.

4.3 Standards work

Committee	Working draft or standard	Consumer representative(s)	Progress or change during reporting year Any action to be taken
ISO/TC 126, *Tobacco and tobacco products* SC3/WG1, *Determination of substances in e-liquids*	ISO/NP 20714, *E-liquid — Determination of nicotine, propylene glycol and glycerol in liquids used in electronic nicotine delivery devices — Gas chromatographic method* ISO/DIS 20768, *Vapour products – Routine analytical vaping machine – Definitions and standard conditions*		DIS 20714 finalized in Jan 2018 • Datasets from 19 labs used, 1 calibration curve covers the whole range of results • Number of proposed technical comments, WG to decide next steps
ISO/TC 126 SC3 WG2, *Routine analytical e-cigarette vaping machine*	ISO 20768, *Routine analytical e-cigarette puffing machine – Definitions and standard conditions*	Patrizia Cavalli, Marc Szeeman, Olivier Théraulaz, SNV Bertrand Dautzenberg and Alan Depauw, AFNOR	22 experts, 4 meetings with a broad range of participation It was agreed that WG2 be disbanded upon publication 18 September 2018

Committee	Working draft or standard	Consumer representative(s)	Progress or change during reporting year
CEN/TC 437, *Electronic cigarettes and e-liquids*		ANEC Franz Fiala	Next CEN/TC 437 plenary meeting in Copenhagen, 21 March 2019 Of concern is that participation in WG meetings and the answers received to the meeting invitations are very low. Both convenors and participative experts raised concerns about this situation. Letters have been sent to NSBs The necessity to deal with the interaction between container materials, device materials and e-liquids will be debated. WG 2 and WG 3 do not believe they have the relevant expertise and resources to deal with this subject There is a ballot out to CEN/TC 437 members to enquire concerning the availability of relevant expertise in the development of this potential new standard
CEN/TC 437 WG 1	*'Terminology and definitions'*		Plenary now decided there will not be a separate standard produced for terms and definitions but the main task of WG 1 is to moderate the vocabulary used in the documents produced by the other WGs
CEN/TC 437 WG 2	CEN TS 17287 published on 2019-01-16 *'Requirements and test methods for electronic cigarette devices'*	Christine Heemskerk	It is disappointing that the final output is a technical specification additional standard It has been decided to forward the published CEN TS to ISO with the request to develop an international standard so improved child resistance features should be included in any ISO standard

Committee	Working draft or standard	Consumer representative(s)	Progress or change during reporting year
CEN/TC 437 WG 3	*Requirements and test methods for e-liquids*	Christine Heemskerk	Discussion on current projects at next meeting in February 2019 a) General principles and requirements for filling and holding e-liquids for vaping products including containers and cartridges b) General principles for testing for quality and nicotine levels of e-liquids c) E-liquid ingredients
CEN/TC 437 WG 4	CEN/TR 17236, *Electronic cigarettes and e-liquids – Constituents to be measured in the aerosol of vaping products*		Now published – note this is a technical report not a standard but with a view to consideration of a standard in the future

4.4 Relevant links

ISO/TC126/SC3, *Vape and vapour products*

CEN/TC437, *Electronic cigarettes and e-liquids*

Vape and vapour products make their debut in international standardization – ISO focus

4.5 Any concern with the standard development

No progress of the relevant activities for standardization.

Details: There are consumer issues in that the given provision "The e-cigarette device shall be child-resistant" is in principle OK (and in line with regulatory provisions) but is not specific enough. It remains unclear which components of an e-cigarette must be child-resistant. The TS must ensure e-cigarettes cannot easily be operated by small children (typically a button must be pushed 5 times in sequence within a certain time) and that any closures for refill openings are child-resistant (typically of push-and-turn type).

Recommended action: A suitable test procedure based on test protocols for child-resistant packaging must be provided (either within the DTS or an improved child resistance features should be included in any future ISO standard).

4.6 Key person

Christine Heemskerk at the British Standards Institution

5. Ethical claims

5.1 Summary of why this work is important to consumers

To make purchasing decisions, consumers rely on claims products make for example, fair trade, organic, and so on. Some of these claims may be misleading, which ones can be trusted?

For several years, ISO's consumer policy committee (COPOLCO) has expressed concerns about the proliferation of ethical claims in the marketplace. It held a workshop in Brazil in 2007, followed by three years of work by an ethical trade fact finding working group, which published its report in 2010.

In 2016, ISO responded by establishing a joint task group between the ISO conformity assessment committee (CASCO) and COPOLCO (JTG 49) to examine the COPOLCO report and look at other programmes and standards, both within ISO and in use in the global marketplace, that relate to 'ethical claims'.

The task group concluded by proposing to CASCO there is a need for an ISO technical specification with requirements for ethical labelling and, with the approval of CASCO, a new work item proposal was circulated and working group 53 was established to develop this document.

WG 53 has three convenors representing the conformity assessment, consumer and developing countries perspectives. Their deliberations began in Geneva in February 2018 with a second meeting in July 2018. DTS 17033 was successfully balloted at the end of 2018 and the final meeting, to address the comments that came in with that ballot, took place in February 2019 in Buenos Aires.

5.2 Summary of current work of significance

One of the most significant issues settled early in the discussions was to address 'ethical claims' rather than ethical labels. This decision helped develop a more useful and robust document.

The in-person participation at these meetings has been small with a few people participating via WebEx. Proportionally the representation from consumers has been good, and active participation from UNEP has been helpful in ensuring the document lines up with their work on providing sustainability information to consumers. We have a lot of comments to address at the final meeting but there is not much disagreement on key issues.

I believe that DTS 17033 is a useful document for those who want to make a credible ethical claim but cannot afford to participate in one of the established programmes currently available. It provides information on how to determine and communicate the scope of any claim and what data and documentation is required to support the claim; ensure transparency; and enable consumers to have confidence in the validity of what is being stated. Care has been taken to write this document so that, where relevant, it can be used with existing standards, such as the 14020 series on environmental labels, claims and declarations, without undermining the more rigorous requirements of those more specific standards.

5.3 Standards work

Committee	Working draft or standard	Consumer representative(s)	Any comment; For example any expected ballot
CASCO WG 53	ISO TS 17033, *Ethical claims and supporting information – Principles and requirements*	Jennifer Hillard, SCC Sadie Homer, BSI Matsumoto Tsunako, JISC Victoria Hailey, SCC Susan Lubega, George Walusimbi Mpanga, UNBS	Publication expected in mid-2019

5.4 Relevant links

ISO/DTS 17033, *Ethical claims and supporting information – Principles and requirements*

5.5 Any concern with the standard development

None.

5.6 Key person

For further information, please contact:

Jennifer Hillard at Standards Council Canada

6. Fire Safety

6.1 Why this work is important to consumers

Fire is always a risk and new materials in combination with other products can affect the fire safety of the consumer. Fire safety covers building materials, white goods, small appliances, plastics, furniture and equipment to protect or warn against fire. Consumers need to understand and speak to the risks that can arise and how equipment and product design can best mitigate fire risks. Consumer participation varies at the related ISO committees. There is a need for a technical understanding combined with a need to keep current on information and cover a broad range of topics.

6.2 Summary of current work of significance

In most cases, the consumer needs are met. In the case of ISO/TC 136 the fire and ignition standards for furniture have not been updated for some time. Given the known reduction in the time to flashover with new synthetics it appears to be an item to address. ISO/TC 21/SC 3 and ISO/TC 92/SC 3 subcommittees have a few projects underway on fire safety equipment and building materials. ISO/TC 163, *Thermal performance and energy use in the built environment*, and its subcommittees are looking at fire safety in their upcoming work. ISO/TC 61 has work in three subcommittees relevant to fire safety.

6.3 Standards work

Committee	**Working draft or standard**	**Consumer representative(s)**	**Progress or change during reporting year Any action to be taken**
ISO/TC 21/SC 3, *Equipment for fire protection and firefighting / Fire detection and alarm systems*	ISO/NP 7240-3 (under development) *Fire detection and alarm systems – Part 3: Audible alarm devices*	Rae Dulmage	This is a project that is starting. Stage Code is 20.20
ISO/TC 61/SC 14, *Environmental Aspects*	ISO/NP TR 23891 *Plastics – Recycling – Necessity of standards*		10.99 Proposal
ISO/TC 61/SC 10, *Cellular Plastics*	ISO/DIS 17880.2 (Under development) *Cellular plastics – Self-supporting metal faced sandwich panels – Cellular plastics*		This project will look at fire safety as part of its content. This is new DIS and is at stage code 40.93
ISO/TC 61/SC 4, *Plastics / Burning Behaviour*	ISO/ PRF TR 20118 (under development) *Guidance on fire characteristics and fire performance of PVC materials used in building applications*		50.20 Approval

ISO/TC 92/SC 3, *Fire Safety / Fire threat to people and environment*	ISO / DIS 13571-1 (under development) *Life-threatening components of fire – Part 1: Guidelines for the estimation of time to compromised tenability in fires* ISO/NP 19706 (under development) *Guidelines for assessing the fire threat to people*		This project is at Stage Code 40.00 – DIS registered Important to consumer safety. This is at 10.99 – New Project Approved
ISO/TC136, *Furniture*	No activity related to Fire Safety standards	Rae Dulmage, SCC Tayfun Avdan, SIS	

6.4 Relevant links

The latest development of the standards and the meeting schedules can be found here:

ISO/TC 21/SC 3, *Equipment for fire protection and firefighting / Fire detection and alarm systems*

– no meetings notified

ISO/TC 61/SC 10, *Cellular plastics* – no meetings notified

ISO/TC 92, *Fire safety*

ISO/TC 92/SC 3, *Fire threat to people and environment*

ISO/TC 136, *Furniture* – no meetings notified

6.5 Any concern with the standards development

No progress of the relevant activities for standardization.

ISO/TC 136 ignition and fire standards for furniture are old. The use of synthetics in furniture and in building materials has changed the dynamics in a residential environment.

Recommended action: Suggest recommending the updating of the ISO/TC135t related standards be proposed.

6.6 Key person

For further information, please contact:

G. Rae Dulmage at the Standards Council of Canada

7. Food safety and labeling

7.1 Summary of why this work matters to consumers

Food labeling, primarily as a means of consumer protection, has exploded – with concerns on nutrition, genetic modification, pesticide and/or additive use, identifying known allergens, product origin disclosure, tracking products to help recalls, and more. In addition, digital labeling by adding the information to QRs or product codes that can be scanned by smartphones is being implemented; and can be used post market to check additional information. It is reported consumers are often confused by 'green labeling'. Those with food sensitivities such as celiac disease rely on specific labeling to confirm products are gluten free.

Since food is international in scope, crossing borders where regulations and or labeling standards vary, the importance of international labeling standards has increased.

Health professionals and associations agree educating the public on their choices and reducing confusion from food labels is integral to stemming this threat to population health and the economy of many countries.

Ingredient lists are lifelines for people with food allergies, says Beatrice Povolo, Advocacy and Media relations Director for Food Allergy Canada, a non-profit advocating on behalf of people with food allergies. "They count on label information to be accurate and truthful and complete in order for them to make a decision of whether that would be a suitable product or not," she said, adding deliberate ingredient substitutions are not on the organization's radar at the moment.

Hot topic issues tend to fall under the umbrella of transparency in the food supply chain. Much of the discussion in food labeling centers on the consumer's right (or need) to know on a variety of issues including, but not limited to: health-related, genetic engineering, irradiation, adulterated food products, gluten, sustainability, and nanotechnology applications.

The debate over food labeling shows no signs of abating. Consumer groups, the health industry, associations advocating/supporting food triggered diseases and niche agricultural groups are mounting pressure on government organizations and industry to bring a cleaner, less confusing, labeling system to the public. In some jurisdictions (such as Ontario, Canada) restaurants are required to provided calorie information on their menus for each item.

7.2 Summary of current work of significance

The standardization of food labeling has been handled to a great degree by legislation and less by a standards process. The FAO refers to some ISO CASCO standards and guides but the Codex Alimentarius still sets out most of the rules for food regulation in the world.

ISO/TC 122 has set out a basic standard for the mechanics of labels and ISO/TC 34 has provided some work on specific products as well as a guidance standard on how to apply ISO 26000 in food production.

The European Food Information Council (EUFIC) published a recent study (2018) on the state of nutrition labelling in the world. The report indicates a trend to more countries mandating specific labelling for nutrition, which though not virtually identical between countries, is often very similar.

The US Department of Agriculture released in 2016 a study on the effectiveness of QR labeling of GM products. They concluded this type of labeling would place an undue burden on the consumer and greatly impede access to information that is currently required for all other forms of food labeling.

On-package labeling is simple, quick, effective. As the USDA study clearly shows, QR codes, websites, and 1-800 numbers are not. Some of the reasons cited are:

- Technological challenges disproportionately impact low-income earners, rural residents, and Americans over the age of 65
- Consumers are unfamiliar with QR codes or do not know that digital links contain food information
- Many of the more than 100 apps on the market that scan QR codes are not intuitive to use and include pop-up ads, causing consumer confusion
- Consumers may not have equipment capable of scanning digital links on their own, and in most cases, there is not a viable alternative provided by retailers
- Even if access to digital disclosure were universal, a shopper would have to scan each item s/he is shopping for on any given shopping trip (which for a family of 4 could easily amount to more than 50 items). This would be an undue burden on the consumer and greatly impede access to information that is currently required for all other forms of food labeling

The need for more consumer involvement continues to exist, to move food labelling standardization along, and to ensure that the disparate authorities that deal with various requirements can work to a comprehensive template.

7.3 Standards work

There are various national/international standards that deal with food but few if any that set out requirements for food labels.

Committee	**Working draft or standard**	**Consumer representative(s)**	**Progress or change during reporting year Any action to be taken**
ISO/TC 34, *Food products*	ISO/WD TR 23304, *Food products – Guidance on how to express vitamins and their vitamers content*		Working Draft Study underway
	ISO/DTS 26030, *Sustainable development and social responsibility – Guidance for using ISO 26000:2010 in the food chain*		CD Vote closed
ISO/TC 34/SC 12*, Sensory analysis*	ISO NP 20784, *Sensory claim substantiation*	Guillermo Zucal, IRAM	CD Vote closed
ISO/TC 122, *Packaging*	ISO 22742:2010, *Packaging – Linear bar code and two-dimensional symbols for product packaging*		Review being completed
	ISO 28219:2017, *Packaging – Labelling and direct product marking with linear bar code and two-dimensional symbols*		Published in 2017

7.4 Relevant links

Examples of international campaigns and studies on food labeling:

- ✓ Consumers International's campaigns
- ✓ BEUC, the European Consumer Organisation: What's in your kitchen?
- ✓ EUFIC Healthy Living – Global Update on nutrition labelling
- ✓ USDA Deloitte Study of Electronic or Digital Disclosure

Meetings:

TC 34 – No meetings scheduled
TC 34 SC12 – July 24-26, 2019 York, United Kingdom
TC 122 – June 25-27, 2019 Norrmalm, Sweden

7.5 Any concerns with the standard development

None.

7.6 Key person

For further information, please contact:

G. Rae Dulmage at the Standards Council of Canada

8. Furniture

8.1 Summary of why this work is important to consumers

Children killed by falling furniture – a worldwide scandal leading to recalls, but not in every country, due to a patchwork of different standards… is an example of how standards directly impact consumer safety, as well as raising issues of performance and fitness for purpose. Other emerging issues include health impacts of chemicals in furniture; and sustainable sourcing.

ISO/TC 136, *Furniture,* is particularly relevant to consumers, especially child safety. There were reports of child deaths in Canada and the US when furniture produced by a global Nordic company, tipped over. The company decided to recall this furniture in Canada and the US as it does not comply with the safety requirements in ASTM 2057-14, *Standard Safety Specification for Clothing Storage Units*. However, no recalls were made in other countries. Apparently, Europe and the US have adequate safety standards, but international ones' safety requirements do not address tipping risk. International Standard ISO 7171:1988, *Furniture — Storage units — Determination of stability,* does not include child safety elements.

Children all over the world should equally be protected, and ISO and IEC need to improve standards in this area. Accident and recalls data for national markets can assist in creating better standards.

8.2 Summary of current work of significance

ISO/TC 136 only works on test methods for furniture – except children's furniture, covered by its new WG 6.

The reason for creating WG 6, *Children's and nursery furniture,* is that the ISO standards for children's furniture have not been updated for many years. The aim is to create global standards for test methods that all countries will implement, including the US, based on test methods in European standards. At a later stage it might be possible to add common global requirements, if agreed.

The plan is to get global accepted test methods for furniture in general and maybe in the future develop globally accepted safety requirements.

A Swedish convenor, working for IKEA, has been nominated to WG 6, and there is representation from the Swedish authorities.

WG 6's scope is decided to encompass:

"The development of safety requirements and test methods for children's and nursery furniture. Technical specifications, reports and standards in regards of general safety and ergonomics for children and infants."

It is developing two standards:

ISO 7175-1, *Children's cots and folding cots for domestic use – Part 1: Safety requirements*
ISO 7175-2, *Children's cots and folding cots for domestic use – Part 2: Test methods*

And has an NWIP for children's mattresses and bunk beds.

WG 6 generally works electronically.

After the Chair of ISO/COPOLCO WG 2 sent the letter (WG 2 N 490/2018) concerning safety and stability of storage furniture to ISO/TC 136, its chair encouraged all the delegations to strengthen consumer participation either directly or in the national mirror committees. He also stressed the need to complete as quickly as possible the revision of the standards on the safety of storage furniture. After a February 2018 workshop where different test methods were tried, the standard for storage furniture has now been updated substantially e.g. by applying a force of 350N if the unit is or can be adjusted to a height of more than 1000 mm, to see if the unit overturns.

There is generally focus on prevention on further accidents concerning inadequate stability of storage furniture not only in the US but also in Korea, Japan, China and Australia. Australia has published a good guide. CPSC in the US is considering if legislation is the way forward (Advance Notice of Proposed Rulemaking) and it is supported by the American industry. American studies show that 80 % of the consumers don't fasten the storage furniture to the wall as indicated in the instructions.

8.3 Standards work

Committee	**Working draft or standard**	**Consumer representative(s)**	**Progress or change during reporting year / Any action to be taken**
ISO/TC 136/WG 3, *Furniture*	ISO/DIS 7171, *Furniture – Storage units – Test methods for the determination of stability*	ISO/TC 136 WG 1-3 Tayfun Avdan, SIS	A Workshop in February used different methods performed on the same unit for evaluating the same stability issue The standard has now been updated substantially e.g. by applying a force of 350 N if the unit is or can be adjusted to a height of more than 1000 mm to see if the unit overturns
ISO/TC 136/WG 6, *Children's and nursery furniture*	NWIP *Children's furniture – Mattresses for cots and cribs – Safety requirements and test methods* ISO DIS 7175-1, *Children's cots and folding cots for domestic use – Part 1 safety requirements* ISO DIS 7175-2, *Children's cots and cots for domestic use – Part 2 Test methods* ISO 9098-1:1994, *Bunk beds for domestic use – Safety requirements and tests – Part 1: Safety Requirements*		The reference document for the NWIP will be **EN 16890:2015,** *Children's furniture – Mattresses for cots and cribs – Safety requirements and test methods* It was decided to only make editorial changes and go directly to publication (skipping FDIS) Postponed until the work on mattresses for cots and cribs has been finalized

	ISO 9098-2, *Bunk beds for domestic use – Safety requirements and tests – Part 1: Test methods* ISO 7171, *Furniture – Storage units – Determination of stability*		
IEC/TC 61, *Safety of household and similar electrical appliances*	IEC 60335-2-116, *Electrical furniture*		IEC/TC 61 has worked on a draft standard for electrical furniture. ISO/TC136 members have some critical points to the draft. For example, the strength test in the IEC draft is only to check the protection of electrical parts – not the furniture strength. This is not clearly explained in the draft. The draft does not address all hazards e.g. child safety. A joint group between the two TCs is under development

8.4 Relevant links

The latest development of the standards and the meeting schedules can be found through these links:

ISO/TC 136, *Furniture*

CEN TC 207, *Furniture*

Other work of possible interest:

CEN TC 252, *Child use and care articles*

ISO/IEC Guide 50, *Safety aspects – Guidelines for child safety in standards and other specifications*

ISO/IEC Guide 51, *Safety aspects – Guidelines for their inclusion in standards*

Play matters - ISO

OECD Furniture tip-over awareness campaign

8.5 Any concern with the standard development

Lack of consumer representation in ISO TC 136 and CEN TC 207.

Recommendation: call for greater participation.

8.6 Key person

Helen Amundsen at the Danish Consumer Council

9. Graphical symbols

9.1 Summary of why this work is important to consumers

Graphical Symbols are used to communicate information, warnings and actions to the public in a consistent manner such that the time to react is quick. As consumers we may be familiar with the "I" information symbol; "running man" for exit; "wheelchair" symbol for accessibility and, on vehicles, the "engine light". Relevant committees are: ISO/TC 145 (Graphical Symbols), and its subcommittees SC 1 (Public Information symbols), SC 2 (Safety identification, signs, shapes, symbols and colours) and SC 3 (Graphical symbols for use on equipment).

There are over 5'000 symbols (see https://www.iso.org/obp/ui/) registered under TC 145 and its subcommittees.

The scope of the overall committee is:

'Standardization in the field of graphical symbols as well as of colours and shapes, whenever these elements form part of the message that a symbol is intended to convey, e.g. a safety sign. Establishing principles for preparation, coordination and application of graphical symbols. General responsibility for the review and the coordination of those already existing, those under study, and those to be established. The standardization of new graphical symbols, when requested by a technical committee, or where it does not fall within the activity of an existing technical committee'.

There is need for consumer input participation through belonging to the member body mirror committee or through liaison to actively take part in the decisions, reviews and discussions on proposed symbols, evaluation methods and new areas of work.

9.2 Summary of current work of significance

To a great extent, the key consumer objective is reached. Some more participation (formal and informal) on the national mirror committees and in the work of the committees that seek to have symbols adopted, registered or developed, would be helpful. CEN and ISO both mandate that all standards that use graphical symbols must have these registered through the relevant ISO/TC 145 subcommittees.

Current work of interest to COPOLCO:

- the "keep out of reach of children" symbol is undergoing comprehension testing and further processing to move it forward
- TC 145 subcommittees are balloting several consumer/public safety symbols
- TC 145 SC1 and its WG4 have discussed a definition of 'accessibility', agreed to set up a category for accessibility symbols, and consider further symbols for accessibility. This work has included liaison with ISO/TC 59 SC16, *Accessibility and the Built Environment*, and international organizations related to disability

9.3 Standards work

Committee	Working draft or standard	Consumer representative(s)	Progress or change during reporting year / Any action to be taken
ISO/TC 145, *Graphical symbols*	ISO 9186-1:2014 *Graphical symbols – Test methods – Part 1: Method for testing comprehensibility*	Rae Dulmage	This is the key standard for symbol comprehensibility. Undergoing systematic review
ISO/TC 145/SC 1, *Public information symbols*	ISO 7001:2007 *Graphical symbols – Public information symbols* The following current amendments are in process: - Amd 104 PI PF 079: Men's changing room 40.60 - Amd 105 PI PF 080: Pedestrian overpass or footbridge - Amd 107 PI CF 022: Laundry service 30.60 - Amd 108 PI PF 082: Recycling – Plastics 30.60 - Amd 109 PI TF 044: Electric vehicle charging station 30.60 ISO/FDIS 28564-3 (Under development) *Public information guidance systems – Part 3: Guidelines for the design and use of information index signs*		This standard contains all the Public Information System and is undergoing revision to incorporate updates and amendments that have been done from 2007 on. This will lead to the 4th Edition
ISO/TC 145/SC 1 WG 4, *Public information symbols* (Revision of ISO 7001)	Establishing a database of accessibility symbols, considering an additional accessibility symbol and defining 'accessibility'		In process – to be further discussed at the May 2019 committee and Working Group meetings
ISO/TC 145/SC 2, *Graphical symbols – safety identification, signs, shapes, symbols and colours*	ISO 7010:2011 *Graphical symbols – Safety colours and safety signs – Registered safety signs* Amendments in process to DAmd 244 are: Safety sign P045: No campfires - DAmd 245: Safety sign P071: Do not cross barrier - DAmd 246: Safety sign P072: No jumping down - DAmd 247: Safety sign W068: Warning; Falling into		New edition at FDIS

	water when stepping on or off a floating surface - DAmd 248: Safety sign W069: Warning; Jellyfish - DAmd 249: Safety sign W070: Warning; Step down ISO/CD TR 20559 (under development) *Graphical symbols – Safety colours and safety signs – Guidance for the development and use of a safety signing system* ISO/WD 22578 (under development) *Graphical Symbols – Safety colours and safety signs – Natural disaster safety way evacuation guidance system*	Rae Dulmage	
ISO/TC 145 SC 2 WG 1, *Safety identification, shapes, symbols and colours*	Various new symbols under development and consideration		Committees and proponents submit their needs and proposals to working group 1 which then considers and provides feedback and processing
ISO/TC 145 SC 3, *Graphical symbols for use on equipment*	ISO 7000:2014, *Graphical symbols for use on equipment – Registered symbols*	None but they consult with the other subcommittees of which Rae Dulmage is a member	Undergoing systematic review

9.4 Relevant links

ISO/TC 145, *Graphical symbols* (includes information on submitting graphical symbols for evaluation and registration) – see meetings in the ISO Meeting platform (requires password)
ISO Store and ISO Online Browsing Platform
IEC/ISO Joint database for graphical symbols for use on equipment (requires password)
ISO/IEC Guide 74, *Graphical symbols — Technical guidelines for the consideration of consumers' needs*
ISO Brochure *ISO committees on horizontal subjects*
ISO Booklet *The international Language of Graphical Symbols*
ISO Focus article *Graphical symbols cross borders* (May 2010, p 36)

9.5 Any concern with the standard development

None.

9.6 Key person

For further information, please contact:

G. Rae Dulmage at the Standards Council of Canada

10. Healthcare organization management

10.1 Summary of why this work is important to consumers

Although there are several stakeholders in the health value chain, individual patient consumers are the most direct end users of healthcare services. Their interests as consumer are vital since these patients not only desire to receive the best possible care, but they frequently are the direct or indirect payors for this care. Anything that maximizes the value they receive in both dimensions (care quality and cost) affects their lives in an immediate and enduring ways.

Expected consumer benefits include:

- ✓ *Patients and consumers of healthcare will benefit from slower increases in the cost of healthcare and the resulting access to care. UK and US research also shows that patients are more satisfied and are healthier when receiving services from better managed healthcare organizations*
- ✓ *Organizations that provide healthcare benefits will enjoy either a reduction in their benefits costs or more predictable, slower increase in the costs of coverage as efficiencies in healthcare management are transferred to the policy holders*
- ✓ *Insurance companies and national Ministries of Health will more accurately monitor and compare the quality of management and assess cost control as they determine which healthcare entity provides the best value for their customers and populations*
- ✓ *Developing countries and rural healthcare providers will more easily access and adopt the most effective practices and metrics of more established and better resourced healthcare systems*
- ✓ *Healthcare entities will enjoy the sharing of effective management practices that will drive better outcomes for patients and will reduce the increase in spending of non-clinical services*
- ✓ *Society in general will be better informed about the effectiveness of their healthcare system and gain access to a better quality of care*

10.2 Summary of current work of significance

ISO TC 304, *Healthcare Organization Management*, had its 3rd plenary in October 2017 in Buenos Aires.

Working Group 1 completed its final working draft of a **terminology** standard, which it planned to submit as a CD bypass document.

Working Group 2 further developed the existing draft **patient-centered staffing** guideline; ensuring this is within the original scope.

Working Group 3 outlined topics that could become subjects in the **hand hygiene** standard, and discussed establishing subgroups to manage the writing, research, editing and logistical demands in developing this.

The Secretary shared a model or framework for standards development for the TC to consider when communicating its progress to outside groups. He also described the ISO policy committee on developing country matters (ISO/DEVCO) programme that provides limited financial support to developing countries who have experts wishing to participate in international standards development activities; briefly reviewed the DEVCO programme; and encouraged TC members to share information about this to potential participants in developing countries.

The Secretary informed that ISO TC 215, *Healthcare Informatics*, expressed interest in convening joint plenaries in Daegu, South Korea in the fall of 2019, and sought the TC's opinion on this.

Other TC developments since the last liaison report (October 2017):

- Membership growth (+3%) (1 member)
    - Increase in Participating (P-) members by 10% (1 member)
        - Colombia (ICONTEC) joined as P-member
        - Hungary (MSZT) moved from Observer (O-) to P-member; and Norway (SN) from P- to O-member
    - The number of Observer (O-) members has not changed
        - Belgium (NBN) and Canada (SCC) withdrew from the committee
        - Hungary (MSZT) moved from a O- to P-member
        - Jordan (JSMO) and Saudi Arabia (SASO) joined as a O-member
        - Norway (SN) moved from P- to O-member
- Liaison relationships remained consistent in 2018
    - Internal: ISO/TC 283, *Occupational health and safety management*, upgraded from Project Committee to Technical Committee
    - External: International Trade Union Confederation (ITUC) became an external liaison and outreach has been made to other external liaison organizations
- Successfully held working group meetings in Vilnius, Lithuania in May 2018
- One new NP and WG were approved by the TC 304 since the October plenary:
    - ISO NP 23447, Global Standard for *Hand Hygiene Performance and Compliance*
    - WG 3, *Hand Hygiene Performance and Compliance*, was established with Dr Christine Greene (US) proposed to serve as Convenor
- The title of ISO NP 22956 was changed by ballot from "Patient Centered Staffing" to "Outcome Based Staffing" to better reflect the purpose of the standard and is consistent with the existing project scope

10.3 Standards work

Committee	**Working draft or standard**	**Consumer representative(s)**	**Any comment; For example any expected ballot**
TC 304 WG 1, *Vocabulary*	ISO/NP 22886, *Healthcare organization management – Terminology*		Currently under DIS balloting, which closes on 13 May 2019
TC 304 WG 2, *Staffing*	ISO/NP 22956, *Healthcare organization management – Outcome based staffing*		Moving to CD drafts in the spring
TC 304 WG 3, *Infection prevention management*	ISO/NP 23447, *Healthcare organization management – Hand Hygiene Performance and Compliance*		

10.4 Relevant links

ISO TC 304, *Healthcare organization management*

10.5 Information of meetings and consumer participation

Committee	Last meetings	Next meeting	Consumer representative(s) in the key area
TC 304, *Healthcare organization management*	1st Plenary Galveston, Texas, USA, 17 February 2017 2nd Plenary London, UK, October 2017 3rd Argentina, October 2018	4th Seoul, South Korea 2019 (proposed)	A call for consumer participation has been issued

10.6 Any concern with the standard development

None.

10.7 Key persons

Ronald B. McKinley and Lee S. Webster at the University of Texas Medical Branch, Galveston, USA

11. Health Informatics

11.1 Summary of why this work is important to consumers

Consumers are increasingly concerned by health informatics with the rising use of e-health and technologies supporting interaction, cross system access and patient information storage and access. These improvements carry great value for patient care, turnaround time… more time for action, less time needed for information sharing.

How you achieve this without compromising safety, security of information, patient privacy – and yet provide improved care – is a concern to consumers. Consumer participation is needed to share advice and concerns on consumer matters related to health informatics, to ensure the intended objective is met, while addressing the consumer issues.

The move to apply artificial intelligence in health informatics will affect consumers.

11.2 Summary of current work of significance

The adoption and implementation of health informatics at times lags the standards that have been developed – it takes a long time for infrastructure to switch from paper and personal intervention to a health informatics system.

At this time, the standards ISO/TC 215 developed cover most concerns with the current state of technology and systems. As new work continues, these will need to be revisited for consumer concerns. New technologies being applied to the health informatics fields create better services for the public but also can open concerns and risks to safety, security, diagnosis and privacy.

11.3 Standards work

Committee	**Working draft or standard**	**Consumer representative(s)**	**Any comment; For example any expected ballot**
ISO/TC 215, *Health Informatics*	ISO TSP, *Digital Elderly Homecare system*	Rae Dulmage Monica Key, ANSI Heather Grain, SA Kelly Abrams, SCC Ken Toyoda, Kouichi Kita, Yasunori Tajiri, Yutaka Ando, Mihoko Okada and Jun Nakaya, Daiki Watanabe, JISC	NA. This is a proposed project to provide a standard for an integrated digital homecare system. There are many good things about this and some issues of privacy, security and safety that arise. The NWIP is out for ballot. It is noted that ISO/IEC JTC1 SC 27 is also proposing some work for this application
	ISO/AWI TR 22696 (under development) *Health informatics – Guidance for identification and authentication for connectable personal healthcare devices*		Project registered

	ISO/DTR 21835 (under development) *Health informatics – Health-related data which a person generates daily*		CD vote has closed
	ISO/AWI 27789 (under development) *Health informatics – Audit trails for electronic health records*		Projects registered
	ISO/AWI 80001-5-1 (under development) *Application of risk management for IT-networks incorporating medical device – Safety, effectiveness and security in the implementation and use of connected medical devices or connected health software – Part 5-1: Activities in the product lifecycle*		
	ISO/CD 81001-1 (under development) *Health software and health IT systems safety, effectiveness and security – Part 1: Foundational principles, concepts, and terms*		

11.4 Relevant links

The latest development of the standards and the meeting schedules can be found here:

ISO TC 215, *Health Informatics* is meeting on 13-17 April 2019 in Goteborg, Sweden and 4-8 November 2019 in Daegu, South Korea – see meetings on ISO meetings portal (password)

World Health Organization (WHO) Study (December 2016) – Global Diffusion of eHealth

11.5 Any concern with the standard development

None.

11.6 Key person

For further information, please contact:

Rae Dulmage at the Standards Council of Canada

12. Performance of household electrical appliances

12.1 Summary of why this work is important to consumers

IEC TC 59, *Performance of household electrical appliances*, its subcommittees and working groups are responsible for developing standards for measuring the performance of electrical household appliances. These normally describe only test methods, without setting any requirements.

From consumers' point of view, it is important that the test methods are based on consumer behaviour and that these test methods provide reproducible results, so that the consumer can rely on declared values (e.g. related to energy or water consumption) and can compare the performance of appliances.

12.2 Summary of current work of significance

The last meeting of TC 59 and its SCs and WGs took place from 19 to 26 October 2018 in Busan, Korea. The next meeting will take place in October 2020. In 2019 only some WGs will meet.

12.3 Standards work

Committee	**Working draft or standard**	**Consumer representative(s)**	**Any comment; For example any expected ballot**
IEC/TC 59, *Performance of Household Electrical Appliances*	IEC 60704-1, *Noise – General* IEC 60704-3, *Noise-determining and verifying declared values* IEC 60704-2-(1,2,3,4,5,6,7,8,9,11,14) *Particular requirements* IEC 61592 TR, *Panel testing* IEC 61923 TR, *Repeatability and reproducibility* IEC 61591, *Range hoods* IEC 61254, *Electric shavers* IEC 61855, *Household electrical hair care appliances – Methods of measuring the performance* IEC 62301, *Household electrical appliances – Measurement of standby power* IEC 60675, *Direct-acting room heaters* IEC 62849, *Performance evaluation methods of mobile household robots*	K Both, DIN Consumer Council, DKE G. Heilmann, ANEC	

	IEC TS 62950, *Specifying smart capabilities of appliances and devices – General aspects*		
TC 59 CAG, AG 14 Chairman's Advisory Group (CAG)		K Both, DIN Consumer Council, DKE	
SC 59 A *Dishwashers*	IEC 60436, *Electric dishwashers for household use – Methods for measuring the performance*	G Heilmann, DIN Consumer Council, DKE	The committee started to work on a test method for commercial dishwashers
SC 59 A/AG 1, *Standard detergent and standard rinse agent* SC 59 A/AG 5, *Reference equipment and test materials* SC 59 A/AG 6, *Global application of test methods for dishwashing appliances* SC 59 A/MT 2, *Dishwasher tests* SC 59 A/WG 3 *Measurement of microbiological properties* SC 59 A/WG 4, *Uncertainty assessment*		G Heilmann, DIN Consumer Council, DKE J Kjeldgaard, Danish Consumer Information Centre, DS	WGs are working on improvements of test methods WG compared existing methods for assessing microbiological properties. Additional basis studies are needed WG shall use appropriate methods for assessing the uncertainty of the measurement of performance and consumption values for dishwashers and propose ways to reduce the uncertainty
SC 59 C, *Heating Appliances*	IEC 60299, *Blankets* IEC 61255, *Heating pads* IEC 60379, *Storage water heaters* IEC 60531, *Thermal storage room heaters* IEC 60675, *Direct-acting room heaters*		

	IEC 62999, *Electric room heating – Underfloor heating*		
SC 59 C/WG 2, *Room heaters* SC 59 C/WG 3, *Water heaters* SC 59 C/MT1, *Maintenance*			
SC 59 D, *Home laundry appliances*	IEC 60456, *Washing machines* IEC 61121, *Tumble dryers* IEC 62512, *Washer-Dryer* IEC 60734, *Water for testing* IEC TR 61923, *Assessment of repeatability and reproducibility*		Work on the 6th edition of the IEC 60456 is still going on
SC 59 D/WG 13, *Test Materials* SC 59D/AG 17, *Global application of 60456* SC 59D/WG 18, *Uncertainty* SC 59 D/WG 19, *Reference machine and programs* SC 59 D/WG 20, *Rinsing-efficiency* SC 59 D/MT 14, *Maintenance team for IEC 61121 & IEC 62512* SC 59 D/ MT 15, *Maintenance team for IEC 60456* SC 59 D/MT 16, *Maintenance Team for IEC 60734*		J Kjeldgaard, Danish Consumer Information Centre, DS	
SC 59 F, *Surface cleaning appliances*	IEC TS 62885-1, *General requirements on test material and test equipment* IEC 62885-5, *High pressure cleaners and steam cleaners for household and commercial use*		New parts for cordless vacuum cleaners (IEC 62885-4) and wet hard floor cleaning appliances (IEC 62885-6) are under development

SC 59 F/WG 3, *Dry surface cleaning appliances* SC 59 F/WG 4**,** *Wet surface cleaning appliances* SC 59 F/WG 5**,** *Surface cleaning robots* SC 59 F/WG 6, *Commercial surface cleaning machines* SC 59 F/WG 7, *Methods of measuring performance of vacuum cleaner under battery operation* SC 59 F/WG 9, *Test equipment and test material*	IEC 62885-2, *Dry vacuum cleaners* IEC 62885-3, Wet *carpet cleaning appliances* IEC/ASTM 62885-6 *Wet hard floor cleaning appliances* IEC 62929 *Cleaning robots for household use – Dry cleaning* IEC/PAS 6261, *Vacuum cleaners for commercial use*		WG 4, 5 and 7 are joint WGs with ASTM Part 4 of IEC 62885 for cordless dry vacuum cleaners is under preparation
SC 59 K, *Ovens and microwave ovens, cooking ranges and similar appliances*	IEC 60705, *Microwave ovens* IEC 60350-*1, Ranges, ovens, steam ovens and grills* IEC 60350-2, *Hobs* IEC 61591, *Household range hoods*	K Both, DIN Consumer Council, DKE	New edition of IEC 60350-2 was published in 2017 (test methods for so-called flexible and free induction zones or cooking areas are included now. Also, a specification for standardized and alternative cookware is introduced)
SC 59 K/MT 1, *Maintenance of IEC 60350, IEC 60705* SC 59 K/MT 3, *Maintenance of IEC 61591*			
SC 59 L, *Small appliances*	IEC 60442, *Toasters* IEC 60530, *Kettles and jugs* IEC 60619, *Food preparation appl*. Amendment 1 IEC 60661, *Coffee makers* IEC 60496, *Warming plates*	K Both, DIN Consumer Council, DKE	

	Amendment 1 & 2 IEC 61309, *Deep-fat fryers* IEC 61817, *Portable appliances for cooking, grilling and similar use* IEC 60508, *Ironing machines* IEC 60665, *A.C. ventilating fans and regulators* IEC 61855, *Electrical hair care appliance* IEC 62863, *Electric hair clippers or trimmers*		
SC 59 L/PT 62947, *Electrically operated spray toilet seats* SC 59 L/PT 63174, *Electrically operated toothbrushes*			IEC 62947-1 & IEC TS 62947-2 for "Electrically operated spray toilet seats for household and similar use" are still under discussion Work on IEC 63174 has just started
SC 59 M, *Cooling and freezing appliances*	IEC 62552 Parts 1, 2, and 3, *Household refrigeration appliances – Characteristics and test methods* IEC TR 63061, *Adjusted volume calculation for refrigerating appliances*		
SC 59 M/WG 4, *Cooling and freezing appliances, food preservation and storage* SC 59M/MT 2, *Maintenance of cooling and freezing appliances standard*			

12.4 Relevant links

IEC/TC 59, *Performance of household and similar electrical appliances*

12.5 Any concern with the standard development

None.

12.6 Key person

For further information please contact:

Karin Both at the DIN Consumer Council, Germany

13. Safety of Household Appliances

13.1 Summary of why this matters to consumers

Over the past 50 years, the standards for the safety of household appliances have been managed by IEC/TC 61, *Safety of household and similar electrical appliances*. At its Tel-Aviv meeting in October 1966, IEC's Committee of Action decided to divide the work of IEC/TC 59. As a result, TC 61 was established. Subsequently, at TC 61's first meeting in February 1967 in New York, USA, it was agreed the scope of this new technical committee would be *"to prepare safety requirements for electrical appliances for household and similar purposes".*

IEC/TC 61 continues to maintain – and develop – standards necessary for manufacturers and the safety of electrical appliances for users, national authorities responsible for the safety of appliances, and bodies certifying appliance safety.

13.2 Main consumer concerns/issues in this area

Customers for IEC/TC 61 standards include: consumers, manufacturers of appliances, certification and testing laboratories, retailers and national (local) inspection authorities. These standards have attained wide use internationally at both regional and national levels. However, in the United States, national standards prevail, although harmonization efforts are underway. The electrical appliance industry is a mature industry – the coverage of current standards produced by TC 61 and its subcommittees is sufficient for most products.

However, the standards produced require frequent amendment to respond to safety problems encountered in the field and to allow manufacturers to gain certification for new features on existing appliance types. New standards are developed in response to an increase in international trade in new appliance types. Usually an existing regional or national standard is available to form the basis of the international standard. It is for these reasons and to not impede development that standardization concerning safety of appliances is generally a reactive rather than a proactive process.

Many aspects relating to the safety of children – when they use an appliance or come into contact with it – are already covered by the IEC 60335 series due to application of ISO/IEC Guide 50, *Safety aspects – Guidelines for child safety*. However, the unpredictable nature of child behaviour makes it inevitable that some aspects can only be introduced on a reactive basis and will be part 2 specific.

Health/hygiene requirements are generally only a safety issue in relation to appliances involved in the commercial distribution, storage and use of foodstuffs, appliances used to clean up hazardous dust and appliances connected to the water mains. These aspects are covered by the existing standards. Performance issues of appliances in general and in particular to the commercial distribution and storage of foodstuffs and domestic storage of foodstuffs are covered by IEC standards produced by other committees such as TC 59 and ISO standards.

13.3 Summary of current work of significance

The key consumer objective is to protect consumers from safety hazards such as fires, electric shocks, burns and mechanical hazards. The aim of consumer participation is to put the consumer's perspective into developing new standards and revising existing standards. For example, consumers focus on safe surface temperatures of electrical appliances for all users and especially children. Mechanical hazards – such as falling ceiling fans – are also addressed by this technical committee in addition to electrical and fire hazards.

13.4 Standards work

Committee	Working draft or standard	Consumer representative(s)	Any comment; For example any expected ballot
IEC/TC 61, *Safety of household and similar electrical appliances*	See IEC server for TC 61	Liaison, Consumers International, Javier Pablo Garcia Fernandez	See link to the left.
IEC/TC 61/SC 61B, *Safety of microwave appliances for household and commercial use*	See IEC server for TC 61 SC 61B		
IEC/TC 61/SC 61C, *Safety of refrigeration appliances for household and commercial use*	See IEC server for TC 61 SC 61 C		
IEC/TC 61/SC 61D, *Appliances for air-conditioning for household and similar purposes*	See IEC server for TC61 SC 61 D		
IEC/TC 61/SC 61H, *Safety of electrically-operated farm appliances*	See IEC Server for TC 61 SC 61 H		
IEC/TC 61/SC 61J, Electrical motor-operated *cleaning appliances for commercial use*	See IEC server for TC 61 SC 61 J		
WG 30, *Cosmetic and beauty appliances incorporating lasers and intense light sources*	See IEC server		
WG 31, *IEC 60335-1, Batteries*			
WG 33, *IEC 60335-2-30,* *Portable fan heaters*			
WG 35, IEC 60335-2-35, *Instantaneous water heaters*			
WG 38 60335-2-7, *Washing machines*			
WG 40, *Fires on dishwashers and other wet household appliances*			

13.5 Relevant links

IEC/TC 61, *Safety of household and similar electrical appliances*

IEC/TC 23, *Electrical accessories*

To prepare standards for electrical accessories for household and similar purposes, the word 'similar' includes locations such as offices, commercial and industrial premises, hospitals, public buildings, etc. These accessories:

- are intended for fixed installation, or for use in or with appliances and other electrical or electronic equipment, and may include electronic components
- are normally installed by instructed or skilled persons; and are normally used by ordinary persons

IEC/TC 34, *Lamps and related equipment*

To prepare international standards with specifications for:

- lamps (including LEDs) and glow starters
- lamp caps and holders
- lamp control gear
- luminaires
- miscellaneous related equipment not covered by another technical committee

IEC/TC 35, *Primary cells and batteries*

To prepare international standards for primary cells and batteries, particularly specifications, dimensions, performance and guidance on safety matters.

ISO/TC 86, *Refrigeration and air-conditioning*

Standardization in the fields of refrigeration and air-conditioning, including terminology, mechanical safety, methods of testing and rating equipment, measurement of sound levels, refrigerant and refrigeration lubricant chemistry, with consideration to environmental protection. The scope includes factory-assembled air-conditioners (cooling), heat pumps, dehumidifiers, refrigerants, and refrigerant reclaiming and recycling equipment as well as other devices, components and equipment such as humidifiers, ventilation equipment and automatic controls used in air-conditioning and refrigeration systems that are not covered by other ISO technical committees.

ISO/IEC Guide 50, *Safety aspects – Guidelines for child safety*

13.6 Any concern with the standard development

None.

13.7 Key person

For further information, please contact:

Jun Young Choi at the Korean Testing Laboratory

14. Image Safety

14.1 Summary of why this matters to consumers

With the development of imaging technology in IT, flashing and moving images, as well as 3D images, appear frequently in the screens of TVs and game machines in our daily lives which may cause undesirable biomedical effects on viewers such as photosensitive seizures, motion sickness, visual fatigue etc.

Moreover, the recent imaging technology made popular at home – head-mounted displays (HMDs) – projects images that sometimes induce VR sickness, a kind of motion sickness, with possible disorientation especially after exposures to virtual reality environments. Standards for design to avoid such undesirable effects are required to protect consumers from those image hazards. The effects are more sensitive for children, and warning systems for parents might help protect children.

14.2 Summary of current work of significance

Standardization work has been done since 2004 and ISO standards on reducing photosensitive seizures and visual fatigue with 3D images have been developed as ISO 9241-391:2016 and ISO 9241-392:2015, respectively. The work is now focused on a standard on visually induced motion sickness. Work items concerning safety in using head-mount-displays (HMD) are also being considered as work for a near future; a preliminary work item on reducing undesirable biomedical effects induced by seeing images in head-mounted displays has recently been registered (ISO/PWI 9241-382).

14.3 Standards work

Committee	**Working draft or standard**	**Consumer representatives**	**Progress or change during reporting year** **Any action to be taken**
ISO/TC159/SC4 *Ergonomics of human system interaction***/WG12**	**ISO DTR 9241-393** *Part 393: Structured literature review of visually induced motion sickness during watching electronic images of human system interaction*	Hans-Jörg Windberg, Hilke Groenewold, Ulrike Kuhlmann, Kristina Unverricht, DIN	Summary of scientific information on visually induced motion sickness. Committee internal ballot was finished and approved. The TR is to be published in 2019.
	ISO 9241-394 *Part 394: Ergonomic requirements for reducing undesirable biomedical effects of visually induced motion sickness during watching electronic images*		Requirements and recommendations for reducing visually induced motion sickness while viewing images on electronic displays. The committee draft was approved. The DIS document is being registered soon.
	ISO 9241-382 *Ergonomics of human-system interaction — Part 382: Reduction of undesirable biomedical effects induced by seeing images presented on head-mounted displays*		Requirements and recommendations for reducing VR sickness, disorientation, and visual fatigue during/after seeing images on HMDs. Preliminary work item registered.

14.4 Relevant links

TC159/SC4, *Ergonomics of human system interaction*

14.5 Information of meetings and consumer participation

Committee	Date of last meeting	Date of next meeting	WG/ Standard(s)	Consumer representative(s)
TC159/SC4	2018/12	2020/02/17-18 or 2020/02/20-21	-	JACONET, Japan

14.6 Any concern with the standard development

None.

14.7 Key person

For further information, please contact: Ken Sagawa at the National Institute of Advanced Industrial Science and Technology, Japan

15. Nanotechnology

15.1 Summary of why this work is important to consumers

The 'nanoscale' is an agreed descriptor principally referring to the size range 1 nm - 100 nm, where 1 nm is 10^{-9}m (0.000000001 m). Nanotechnology innovations represent an industrial revolution at the very small scale where advances in the science and technology are equivalent to that of space programmes in their revolutionising capacity.

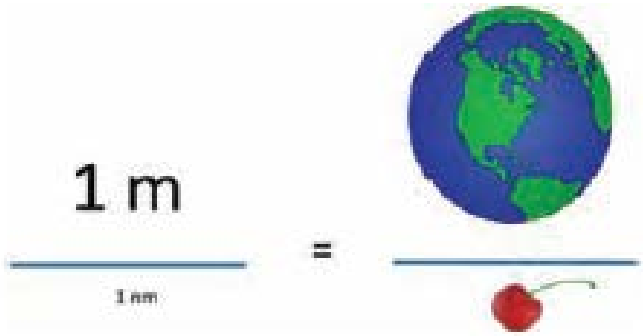

Figure 1 — Comparative size of 1 nm

The last 20 years have seen exponential growth in nanotechnologies R&D and applications. Today their use in consumer products is moving rapidly to ubiquity – their utility, risks and benefits throughout their life-cycle are important for society. Consumers would find their daily lives much disrupted from what they now expect if there were restrictions on use, but long-term impact, and the fate of some nanomaterials in the environment is not established. So it is imperative the wide consumer community notes the issues to be addressed.

Materials in the nanoscale may exhibit properties with new or enhanced characteristics. Properties that can change at the nanoscale might be a) optical (e.g. transparency); b) electrical (e.g. conductivity); c) mechanical (e.g. tensile strength) or d) chemical (e.g. catalysis). The new or enhanced properties are known as 'nanoscale phenomena'.

The main consumer issues are:

- ✓ Environmental safety/sustainability – life cycle chain of both industrial production and products – covering both end of life and end of consumer use
- ✓ Human health exposure – effects over short/long-term for consumers and occupational healthcare workers
- ✓ Traceability/biomarkers and other indicators
- ✓ Labelling/other information – utility, safety and informed choice
- ✓ Interface of nanotechnology – with biotechnology and industrial and medical innovation

15.2 Summary of current work of significance

At TC 229, the work to date has been with working groups on terminology (a very wide and encompassing exercise in domains from general terms to particular material groups, e.g. cellulose, clay, and 2D materials such as graphene and silicon); in metrology and assays; material specifications; health, safety and environmental aspects; along with work on sustainability and consumer issues.

Consumer representatives attending the meetings have direct access to the development of particular standards or via the new Sustainability, Consumer and Social Dimension Task Group formed in 2018 when the Sustainability WG was disbanded and the function incorporated into the existing consumer task group.

The UN Sustainable Development Goals have been formally adopted by TC 229.

In 2017 a new 'Products and Applications' Task Group was formed from an informal 'Nano-Bio Research Study Group' and going forward work on particular standards for consumer representatives is likely to follow more closely the pattern of work in other Key Areas.

15.3 Standards work

JWG1 on Terminology:

- has completed a series of standards (80004) which it is now looking to consolidate, establishing a hierarchy and creating an online publishing format to facilitate easy and timely revisions. This is a pivotal point in the JWG1 remit. The project is looking for a leader
- a checklist has been prepared for use with all new terminology documents to ensure consistency
- some older standards which have not been revised but remain in the 80004 series are being reviewed as part of a house-keeping exercise
- the US has championed new work on 'nano-terms, whether these are 'nano-exclusive' or 'nano-specific'

WG 4 Material Specifications:

- One item in this working group to highlight is the development of TS 2195, led by Iran, on *Nanotechnologies – Polymeric nanocomposite films for food packaging – Barrier properties: characteristics and measurement methods*. This project has encountered bumps in the road but should come to ballot during 2019 and represents a significant achievement for Iran in an area of significant potential

WG 5 Products and Applications:

- a roadmap and checklist were developed in 2018
- several market surveys were received during the main ISO meeting in November 2018 which are to lead to New Work Items in the areas of anti-bacterial textiles, food packaging, bio-sensors, and DNA identification technologies

Consumer objectives

Nanotechnologies and other emerging/converging technologies – which includes synthetic biology, fine bubbles and biotechnology – are fundamental revolutionizing technologies. Consumer representation at the very earliest opportunity is important in developing common standards, for instance in vocabulary and metrology as well as applications. As new forms of materials are introduced into the environment their safety and life-cycle impact may have both short- and long-term effects. Active participation by consumer representatives ensures societal issues are considered throughout the standard development process.

Fine Bubbles technologies are emerging slowly – there are still several theoretical problems with the science which is full of unknowns, but recognizably powerful technological/biomedical applications. Properties are varied. There can be uncertainty in number concentration in extreme environments, for example, some bubbles can last a nano-second while others have been measured

up to 11 months. Areas of use include: cleaning/disinfection (salt-, oil- stained); hydroponic growth (with extremely efficient, large trials on lettuce); algae removal; oil/fuel injection applications; medical acoustic (ultrasound); and other biomedical applications.

The emerging technologies not only have the potential to make our lives more streamlined but also to solve some of the planet's problems posed by human industrial behaviours, and those of population growth in terms of food supply.

The Technical Report in Voluntary Labelling needs revision but it is an area that is highly political, and it is difficult to get it back on to the agenda. Members in WG 5 Products and Applications were keen for standards to underpin certification processes but have accepted for the moment that this WG is for performance standards which must stand separate from certification. Nonetheless the voluntary labelling issue is a key concern for the Consumer Representatives.

Traceability terminology and technical standards are essential for monitoring the penetration of nanotechnologies in industries. This area has not progressed as quickly as it should have.

The TC 229 Sustainability, Consumer & Societal Dimensions Task Group follows all these topics and acts as a forum for horizon scanning. One of its projects for 2019/20 is to update its Terms of Reference and then to update the 2013 survey of ISO member consumer organizations and their awareness of nanotechnologies.

Graphene is a nanomaterial composed of carbon atoms arranged in tightly bound hexagons just one atom thick which exhibits extraordinary properties in terms of strength and potential for speed amplification. It is 200 times stronger than structural steel. It can be used for anything from composite materials (carbon fibre) to electronics: it can make things faster and cheaper. Three million sheets of graphene on top of each other would be 1mm thick.

Graphene is taken from graphite, which is made up of weakly bonded layers of carbon. China has the world's largest graphite production. The 2019 ISO TC 229 Plenary is to be held in China.

Specific standards on which COPOLCO representatives have had input:

Committee	**Working draft or standard**	**Consumer representative(s)**	**Any comment; For example any expected ballot**
ISO TC 229 WG4, *Material Specifications*	TS 2195, *Nanotechnologies – Polymeric nanocomposite films for food packaging – Barrier properties: characteristics and measurement methods*	Sue McGinty	Due for ballot in 2019
ISO TC 229 JWG1, *Terminology*	*Nanotechnologies – Vocabulary – Part 3: Carbon nano-objects*	Elaine Attwood Sue McGinty	In development
	Nanotechnologies – Vocabulary – Part 4: Nanostructured materials		
	Nanotechnologies – Vocabulary – Part 6: Nano-object characterization		
	Nanotechnologies – Vocabulary – Part 8: Nanomanufacturing processes		

15.4 Relevant links

The latest development of the standards and the meeting schedules can be found through these links:

ISO TC 229, *Nanotechnologies* – see work programme

ISO TC 281, *Fine Bubbles*

Nano-labelling for well-informed consumers

Veillenanos – France also has a European and global observatory

15.5 Any concern with the standard development

Difficulty reflecting consumers' views into the relevant standards setting
Dr McGinty and Elaine Attwood are the only two independent consumer representatives
Recommendation: Call for more consumer representatives, ideally from the different continents

15.6 Key person

For further information, please contact:
Dr Sue McGinty at the British Standards Institution

16. Online Reputation

16.1 Summary of why this work matters to consumers

A vast number of consumer transactions and interactions now take place via the internet, and millions of consumers each year read and write online reviews. The rapid growth of consumer review sites, covering a wide range of products (e.g. clothes, electrical appliances, toys, cars) and services (e.g. restaurants, hotels, builders, plumbers, electricians, lawyers), has the potential to empower consumers and drive industry improvements, by creating a more dynamic way exchange of information. Not only are suppliers asking for consumer reviews, consumers are talking back, and talking to each other.

As online reviews are increasingly influential to consumers' purchasing decisions, it is vital to both consumers and suppliers that sites are managed effectively to build confidence in the quality, integrity, accuracy and transparency of reviews. Both consumers and suppliers have reported some problems with online reviews. These problems might be intentional or unintentional; but can lead to a degradation of trust in the online review process.

ISO 20488 offers requirements to organizations that manage consumer review sites, detailing good practice throughout the process, from collection to moderation and to publication. It gives recommendations that increase consumer trust in online consumer reviews, increase the protection of suppliers from exploitation and mischief, and improve the purchase decisions of consumers and the quality of products and services provided by organizations.

16.2 Summary of current work of significance

ISO 20488 was published in 2018. The United Kingdom had a launching event with FeeFo in September 2018. Canada has moved its involvement to "Observer status" as the new work proposal presented by the Chinese wasn't supported. There is no current work in the committee.

16.3 Standards work

Committee	**WG / Standard(s) affected**	**Issue addressed / Progress or change reported**
ISO/TC 290, *Online Reputation* WG 1, Online Consumer Reviews	ISO 20488, *Online Consumer Reviews – Principles and requirements for collection, moderation and delivery processes for online consumer reviews*	ISO 20488:2018 is published

16.4 Relevant links

Putting the trust back into online reviews

16.5 Any concern with the standards development

- ✓ No progress of the relevant activities for standardization

16.6 Key person

For further information, please contact: Patrick Harkness at the Standards Council of Canada

17. Packaging / Child resistant packaging

17.1 Summary of why this work matters to consumers

Packaging has many issues attached. We are in a society of packaging of contents, and the question is whether the packaging achieves its purpose, of being accessible and keeping products safe from damage and degradation, while being safe, avoiding migration of harmful substances to the contents, and environmentally disposable, among other issues.

In terms of safety, every year children die after swallowing medicine or common household products. So the ability of a container to prevent children accessing the contents is tested using panels of young children and clearly defined test protocols described in ISO 8317, *Child-resistant packaging — Requirements and testing procedures for reclosable packages,* and EN 14375, *Child-resistant non-reclosable packaging for pharmaceutical products — requirements and testing,* and EN ISO 13127, *Packaging — Child resistant packaging — Mechanical test methods for reclosable child resistant packaging systems.*

ISO/IEC Guide 41, *Packaging – Recommendations for addressing consumer needs,* has been updated to address emerging societal concerns. Two references were also added to the bibliography: ISO 11156, *Packaging — Accessible design — General requirements*, and ISO 17480, *Packaging — Accessible design — Ease of opening.*

17.2 Summary of current work of significance

17.3 Standards work

Committee	**Working draft or standard**	**Consumer representative(s)**	**Any comment; For example any expected ballot**
ISO/TC122/SC3/WG 3, *Child resistant packaging*	EN ISO 8317, *Packaging — Child-resistant packaging — Requirements and testing procedures for reclosable packages* EN ISO 13127: 2012 *Packaging — Child resistant packaging — Mechanical test methods for reclosable child resistant packaging systems*	Axel Thiele, DIN (in SC 3)	No news ISO/NP 13127 is under development (ISO lead)
CEN/TC261/SC5/WG27 *Child resistant packaging*	EN 14375: 2016, *Packaging — Child resistant non-reclosable packaging for pharmaceutical products — Requirements and testing* EN 862: 2016, *Packaging — Child-resistant packaging — Requirements and testing procedures for nonreclosable packages for non-pharmaceutical products*		No news No news

17.4 Relevant links

ISO/TC 122, *Packaging*
ISO TC 122 SC 3, *Performance requirements and tests for means of packaging, packages and unit loads*
CEN TC 261 SC 5 WG 27, *Child resistant packaging*

ISO/TC122/SC5/WG 27, *Child resistant packaging*
ISO/IEC Guide 41, *Packaging – Recommendations for addressing consumer needs*

17.5 Any concern with the standard development

None

17.6 Key person

For further information, please contact:

Helen Amundsen at the Danish Consumer Council

18. Data Protection and Privacy

18.1 Summary of why this work is important to consumers

In this digitally pervasive 21st Century, protection of consumer's private lives from digital intrusion and harm, as well as any loss of consumer rights, is fundamental to consumer trust in the digital world.

If consumer trust is undermined, many of the benefits of digital technology could be delayed or not achieved in full. Privacy protection is the foundation for building consumer digital trust.

18.2 Summary of current work of significance

ISO/PC 317, *Privacy by Design of Consumer Goods and Services*, first met on 1-2 November 2018 in London. An ad hoc group was set up to review the great many standards that address issues relevant to consumer privacy over a 2-month period to ensure:

- there is no duplication* of work already in existence in other standards or being developed elsewhere

- that the relevant standards can be referenced for more detailed design topics in the developing ISO 31700.

* This has been necessary as the COPOLCO gap analysis, that preceded the new work item proposal, was undertaken in 2015/16 and many new standards of relevance to privacy have emerged since then.

18.3 Standards work

Committee	**Working draft or standard**	**Consumer representative(s)**	**Any comment; For example any expected ballot**
ISO PC 317, *Consumer Protection: Privacy by Design of Consumer Goods and Services*	ISO/NP 31700 WD 1	Pete Eisenegger, BSI CPIN, UK Xanthe Couture, Consumers International liaison Amelia Andersdotter, ANEC liaison Rae Dulmage, Canadian delegate	Project Committee 317 became active in November 2018 With the help of an initial expert ad hoc group progress is being made on WD 1 of ISO 31700 to be circulated to PC 317 for their meeting in May 2019

18.4 Relevant links

ISO/PC 317, *Consumer protection: privacy by design for consumer goods and services*

18.5 Any concern with the standard development

The initial work on ISO 31700 over the first 2.5 month working period looks promising.

18.6 Key person

Peter Eisenegger at the British Standards Institution

19. Robotics

19.1 Summary of why this work is important to consumers

Automated or programmable systems including robots are increasing common – society's appetite is seemingly insatiable. These devices offer many positive attributes, but also potential to harm. The technology can be badly applied or, because of its inherent flexibility, used inappropriately. Physical injury can result from unpredictable or unexpected movements and personal security can be at risk through the communications networks systems rely upon.

At the same time society needs to take advantage of this technology, so it must be available at a reasonable price and as accessible as possible. Indeed, one significant use of the technology is to assist less able consumers in their daily lives.

Existing standards ensure the safety of machines, but the unique nature of robotic systems is not adequately covered by these. Some existing core standards need to be updated and a new suite of standards is required to cover new applications and support the various general issues such as availability and ethics.

Industry continues to be the dominant user of robots, but consumers are rapidly catching up. Consumers will be the ultimate beneficiary of robot technology and must therefore participate in the work to ensure that it meets their needs and they are not put at risk.

Artificial Intelligence (AI)

Application of AI to robotics has the potential to transform the capabilities of these machines. Robots that use AI can be more flexible, 'learn' to fulfil new tasks and be used in a wider range of applications that will benefit consumers. However, it also adds risks that will need to be addressed by the new standards to include functional predictability and a huge range of ethical questions. Consumers must be a part of the process to set the standards and define where the limits of AI centred machines can be used.

19.2 Summary of current work of significance

General – After 18 months of debate, no consensus has been reached on restructuring ISO/TC 299, *Robots and robotic systems*. The direction however, continues to be toward consolidation of industrial and non-industrial standards. At the same time there is a move to define robot standards as Type B documents to reflect their flexibility in terms of applications. Fundamentally these changes should not result in problems for consumers but there is a risk industrial domination will limit the potential for consumer products. An example is the decision by TC 299 (despite consumer objections) to exclude ethics from its scope.

Technology developments and greater connectivity is increasing the strain on current standards and adding to the need for clear cooperation between standards committees, particularly IEC and ISO. Unfortunately, no real progress has been made in this respect by either organization at a committee level.

Availability – The design and manufacture of robots is dominated by a few large corporations. To make robots more accessible, there needs to be greater flexibility and a wider choice of hardware and software. One new standard (ISO 22166-1, *Robotics – Modularity for service robots)* to facilitate this is in development.

Accessibility / Safety – Safe domestic use of robots requires a new approach to machine safety not envisaged by the current standards, particularly for systems which make use of AI. This has been recognised by ISO/TC 199, *Safety of machines*, who have begun the process of considering how risk assessments, a cornerstone of machine safety, can be applied to configurable autonomous machines. At the same time ISO/TC 299 are incorporating requirements for collaborative operation and some limited content relating to connectivity into ISO 10218, *Robots and robotic devices – Safety requirements for industrial robots*. Progress is also continuing on the new standard, ISO 21260, to enable safe physical interaction between people and machines.

Ethics – Application of robotic systems raises many ethical questions. However, despite considerable interest in this subject by many international organizations and recognition standardization offers a vehicle to address these issues, ISO/TC 299 has decided ethics should not be covered by the Robotics committee.

Outside ISO, IEC has recently formed a new Standards Evaluation Group (SEG). SEG 10, *Ethics in Autonomous and Artificial Intelligence Applications,* will help identify the key issues to be addressed and recommend any changes needed to the standards structure to do so. Further collaboration between committees is an expected outcome – it is hoped this will also lead to more collaboration between organizations, i.e. ISO and IEC.

Independently, the UK National Standards Body continues to develop its own standard and to talk to IEEE about a joint project based upon the UK Robot Ethics standard BS 8611.

19.3 Standards work

Committee	**Working draft or standard**	**Consumer representative(s)**	**Progress or change during reporting year** **Any action to be taken**
ISO/TC 299, *Robotics*		Brian Tranter	Debate about a new structure continues, including proposals that would lead to consolidation of industrial and non-industrial standards. It is important that consumers are not left behind in this process. Ethics has been removed from the scope. Standards are required so local projects or other international approaches are needed
WG 1, *Vocabulary and characteristics*	ISO 8373:2012, *Robots and robotic devices – Vocabulary*	None	CD approved January 2019. Work is continuing to establish a common definition for 'Robot' and 'Robotic Systems' with IEC. A definition for degree of autonomy (particularly

			important in medical robots) is also being considered
	ISO 19649, *Mobile robots – Vocabulary*	None	No change
WG 2, *Personal Care Robot Safety*	ISO 13482:2014, *Robots and robotic devices – Safety requirements for personal care robots*	Brian Tranter	No change
	ISO/NP TR 23482-1, *Test methods*		DTR ballot approved and comments addressed. Subject to some final corrections document will be submitted for publication
	ISO/NP TR 23482-2, *Application Guide*		Draft submitted to secretariat for publication.
WG 3, *Industrial Robots*	Various Industrial standards including ISO 10218 (Parts 1 & 2), *Robots and robotic devices – Safety requirements for industrial robots*	None	Under review. Collaborative robots (cobots) and recognition of connectivity to be added No immediate effect on consumers. However, changes to definitions and a move to a Type B document could bring 'consumer robots' within its scope. Potential constraints on consumer choice and availability must be avoided
WG 4, *Service robots*	ISO 18646-1:2016, *Robotics – Performance criteria and related test methods for service robots – Part 1: Locomotion for wheeled robots*	None	No change
	ISO/DIS 18646-2, *Robotics – Performance criteria and related test methods for service robots – Part 2: Navigation*		FDIS published for ballot January 2019
	ISO/CD 18646-3, *Robotics – Performance criteria and related test methods for service robots – Part 3: Manipulation*		CD approved January 2019 Relatively few comments. Concerns include practicality of some sections due to the complexity of the consumer environment and some of the

			requirements imposed upon manufacturers
	ISO/CD 18646-4, *Robotics – Performance criteria and related test methods for service robots – Part 4: Lumbar support robots*	None	CD published for ballot January 2019
	ISO/DTR 9241-810:2019, *Ergonomics — Ergonomics of human-system interaction — Part 810: Supplement to human-system issues of robotic, intelligent and autonomous systems*		Includes systems with some level of self-learning, autonomous reconfiguration or AI and identifies several issues – ethical, questions about the possible effects of robots on people and social effects. This is out after the key person report, so Brian Tranter will report this in the next Consumer Update
WG 5 (with IEC/SC 62A & 62D), *Medical robot safety*	IEC TR 60601-4-1, *Medical electrical equipment – Part 4-1: Guidance and interpretation – Medical electrical equipment and medical electrical systems employing a degree of autonomy*	None	No change
	IEC 80601-2-77, *Medical Electrical Equipment – Part 2-77: Particular requirements for the basic safety and essential performance of medical robots for surgery*	None	Approved for publication as FDIS
	IEC 80601-2-78, *Medical Electrical Equipment – Part 2-78: Particular requirements for the basic safety and essential performance of medical robots for rehabilitation, compensation or alleviation of disease, injury or disability*	None	Approved for publication as FDIS

WG 6, *Modularity for service robots*	ISO 22166-1, *Robotics – Modularity for service robots – Part 1: General requirements*	None	Due to the number of comments received and the resulting changes to the document a second CD ballot was held. This was approved January 2019. Comments need to be addressed
ISO/TC 199, *Safety of Machines*	ISO 12100:2010, *Safety of machinery – General principles for design – Risk assessment and risk reduction*	Brian Tranter	No change
WG 12, *Human Machine Interactions*	ISO 21260, *Safety of Machinery – Mechanical safety data for physical contacts between moving machinery and people*		DIS approved but continuing resistance to this standard from the industrial robotics community
IEC SEG 10, *Ethics in Autonomous and Artificial Intelligence Applications*			New group that has begun the task of considering the impact of AI Kick off meeting held to establish questions that need to be addressed
BSI/AMT/-/2, *Robots*	BS8611:2016, *Robots and robotic devices. Guide to the ethical design and application of robots and robotic systems*		Standard is under review. Changes include clearer requirements for an 'ethical robot' Questionnaire published through Cranfield University (see link below) A collaboration with IEEE to develop a joint standard is being considered

19.4 Relevant links

UK Robotic Ethics Questionnaire
ISO/TC 299, *Robotics*
IEC SEG 10, *Ethics in Autonomous and Artificial Intelligence Applications*
BSI/AMT/010, *Robots*
ISO/TC 199, WG 12, *Human-machine interactions*
The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems

Useful Robotics websites / recent articles

Robotic Industry Association
International Federation of Robotics
Why AI Won't Overtake the World, but Is Worth Watching
The Consumerization of Robots – Implications for You, Me, and Industry
Artificial Intelligence and Robotics: Impact on society
European Robotics

19.5 Information of meetings and consumer participation

Committee	Date of last meeting	Date of next meeting	WG/ Standard(s)	Consumer representative(s) (Name, organization/ affiliation) involved in the key area
ISO/TC 199 *Safety of Machines*	2018/02	2019/02	WG12 ISO/NP 21260	Brian Tranter BSI CPIN
	2018/10	2020/04	Plenary	
ISO/TC 299, *Robotics*	2018/06	2019/06	WG meetings (See above)	
	2018/06	2020/05	Plenary	
IEC SEG 10, *Ethics in Autonomous and Artificial Intelligence Applications*	2019/01	2019/02	Evaluation Group	
BSI/AMT/010, *Robotics*	2019/01	2019/05	UK mirror committee for ISO/TC299 and its WGs	
	2019/01	2019/03	Ethics Group	

19.6 Any concern with the standard development

a) No progress of the relevant activities for standardization

- Decision by TC 299 to exclude Robot Ethics from scope

Recommended action:

- ➢ Work with other organizations to develop standards

b) No progress of the relevant activities for standardization

- Continuing debate over the structure and scope of TC 299 hampers standards development

Recommended action:

- ➢ Encourage the TC to come to a conclusion and focus on standards

c) Difficulty reflecting consumers' views into the relevant standards setting

- Domination of TC by industrial interests

Recommended actions:

- Continue to object to industrially driven goals that are not in the interest of consumers through membership of the relevant TCs
- Encourage representatives, particularly from China and other parts of Asia, to support consumer goals for new and existing standards

d) Need for improved coordination

- Potential for differing standards to be generated by different uncoordinated committees

Recommended action:

- Use the consumer network to identify robot standards in different committees and encourage consistency

e) Keeping up with the pace of innovation

- The pace of development and application of robotic technology outstrips the standards work. Standards will eventually catch up but in the meantime, the environment is uncontrolled and unchecked – which must be a risk to consumers

Recommended action:

- Little that can be done other than to encourage the development and adoption of new standards as they are prepared

19.7 Key person

For further information, please contact:

Brian Tranter at the British Standards Institution

20. Safety of toys

20.1 Summary of why this work is important to consumers

Child safety is an emotive issue, especially when accidents happen, or lives are lost – and when better standards could prevent these. Safety goes beyond physical properties and adequate warnings, to encompass the composition of toys to ensure they do not contain harmful organisms or substances with immediate and/or unknown long-term health effects, to which children are particularly vulnerable due to their physical immaturity.

ISO and CEN share this work. Global alignment is still on the agenda of ISO/TC 181, *Safety of Toys*. A common global standard for toys benefits safety. But consumer representatives must be assured requirements are not being relaxed in this process.

Note: Consumers should be aware counterfeit toys on the rise worldwide are particularly harmful as they meet no standard. New digital issues such as the right to privacy are emerging – eg Cayla the doll was banned in several countries.

20.2 Summary of current work of significance

The task group which compares the three standards ISO 8124 part 1, EN71 part 1, and ASTM F963 (parts relate to mechanical and physical properties) has published its first technical report, and its work continues.

Migration of certain elements – a working group is revising test methods in ISO 8124-3, *Safety of toys – Part 3: Migration of certain elements*, to include a validated method using ICP-OES (Inductively Coupled Plasma Optical Emission Spectrometry).

Chemical toys – a working group is working on new standards, *Chemical Experimental Sets* and *Chemical Toys*, fully based on EN71-4:2013 and EN71-5:2015.

Microbiology – the new working group (WG 10) is developing requirements and test methods for microbiological aspects. The basis for discussions at its first meeting was the current requirements in ASTM F963. This will be a new section to ISO 8124-12, *Microbiological hazards*. The WG now envisions the output as a standard for microbiological cleanliness and preservation effectiveness, plus an informative annex covering suggested good manufacturing practices; but draws attention to the fact this format may change as work progresses.

Phthalates – in preparation of its next meeting, WG 6 intends to collect more information and further study new phthalates, new test methods and a new composite test method; and to start work on a potential future revision of the standard.

Age determination guidelines – the differences between the new draft CPSC guidelines and TR 8124-8, *Age Determination Guidelines*, were discussed; and Working Group 7 reinstated.

Data privacy, cybersecurity – TC 181 discussed whether these could be covered by toy safety standards. Cybersecurity is covered by other TCs on a far more technical level. The ASTM is also considering this issue in a broader perspective. Warnings; an easy way to change to offline status; and ensuring offline status; are to be considered. Work is going on in different parts of the world – it would be valuable to compile. TC 181 will call for input to collect information on ongoing work and thus support a further discussion on potential work.

The next meeting will be in Seoul, Republic of Korea in September 2019.

20.3 Standards work

Committee	Working draft or standard (number and title)	Consumer representative(s)	Any comment; For example any expected ballot
ISO TC 181 WG 1, *Safety of toys*	Draft amendment 1 to ISO 8124-1, *Safety of toys – Part 1: Safety aspects related to mechanical and physical regarding "Flying toys"* ISO 8124-10, *Safety of toys – Part 10: Experimental sets for chemistry and related activities* ISO 8124-11, *Safety of toys – Part 11: Chemical toys (sets) other than experimental sets*	Helen Amundsen, DK Antonio Bonacruz, Australian Consumer's Association Christine Simpson, SCC	All are progressing to DIS for comments and voting
ISO TC 181 WG 3	ISO 8124-3 amd 2 – Migration (Finger Paints) ISO 8124-3 – Migration		Published in September 2018 Circulated for CD-ballot
ISO TC181 WG 6	ISO FDIS 8124-6 – Phthalates		Approved, expected publication first quarter 2019
ISO TC181 WG 10	ISO 8124-12 – Microbiology		Presumable registration as PWI – Microbiological requirements from ASTM F 963 will be used as basis
CEN/TC 52, *Safety of toys*		ANEC	

20.4 Relevant links

ISO/TC 181, *Safety of toys*
CEN/TC 52, *Safety of toys*
Play matters - ISO

ANEC Position paper

20.5 Any concern with the standard development

None.

20.6 Key person

Helen Amundsen at the Danish Consumer Council

21. Security and resilience

21.1 Summary of why this work is important to consumers

As the safety and security of consumers are threatened by new challenges, risks and threats, organizations are called on to improve their capacity to prevent, mitigate and respond to emergency situations and the resilience capability of their organizations and their communities.

Commitment to continuity of service and resilience increases the likelihood that disruptions are prevented and the effects on consumers mitigated. Consumers also benefit when impacts are minimized by systems that ensure the authenticity of products and documents.

21.2 Summary of current work of significance

The following initiatives will help consumers be more aware of potential risks, the importance of involvement in prevention and preparedness activities; and improve communication and cooperation with consumers during the response and recovery phases of an emergency:

ISO 22395, *Guidelines for supporting vulnerable persons in an emergency*, gives practical advice to support consumers in emergencies. During local disasters, citizens and consumers, along with small businesses, often self-organize using social media platforms.

ISO 22319, *Guidelines for spontaneous volunteers*, assists with involving spontaneous volunteers in incident response and recovery. It helps organizations establish a plan as they consider whether, how and when spontaneous volunteers can provide relief for all identified hazards.

ISO 22329, *Guidelines for the use of social media in emergencies*, is a guidance standard on the use of social media in emergency management, to improve communications between organizations and members of the public in all phases of emergency management.

TC 292 standards also contribute to consumer product security and reliability through authentication, identification and prevention of counterfeit and fraud that impact consumers:

ISO 12931, *Performance criteria for authentication solutions used to combat counterfeiting of material goods*; ISO 16678, *Guidelines for interoperable object identification and related authentication systems to deter counterfeiting and illicit trade*; ISO 22381, *Authenticity, integrity and trust for products and documents – Guidelines for establishing interoperability among object identification systems to deter counterfeiting and illicit trade*; and ISO 22382, *Security and resilience – Authenticity, integrity and trust for products and documents – Guidelines for the content, security, issuance and examination of excise tax stamps,* serve this purpose.

21.3 Standards work

Committee	Working draft or standard	Consumer representative(s)	Any comment; For example any expected ballot
TC 292		Norma McCormick Kimberly Carty, James Leflar, Curt Floyd, ANSI A. Rofiq Hadi, BSN Jeanne Bank,	

		Patrick Harkness, Graham Whitehead, Agni Shah, Adrienne Chung, SCC Adalberto Biasiotti, UNI	
TC 292 WG 1	ISO 22300 – Vocabulary	Norma McCormick	Under revision – 3rd edition
TC 292 WG 3	ISO 22328, *Emergency management – Guidelines for implementation of a community-based natural disasters early warning system*		Draft International Standard (DIS)
	ISO 22329, *Emergency management – Guidelines for the use of social media in emergencies*		Working draft
TC 292 WG 5	ISO 22395, *Guidelines for supporting vulnerable persons in an emergency*	Jeanne Bank	Published
	ISO 22370, *Security and resilience – Community resilience – Framework and principles for urban resilience*		Working draft
TC 292 WG 6	ISO/CD 22341, *Protective security – Guidance for security and crime prevention by urban design and management*		Ballot to approve circulation of the draft as a DIS. Due 2019-02-28

21.4 Relevant links

ISO/TC 292, *Security and resilience*

21.5 Any concern with the standard development

None.

21.6 Key person

For further information, please contact:

Norma McCormick, Corporate Health Works, Canada

22. Ecommerce & Financial Services

22.1 Summary of why this work is important to consumers

With the business landscape undergoing significant changes in the last decade, the need for an evolved consumer protection framework is being felt across sectors and nations. This is largely due to the emergence of the digital economy, technological advancements in how financial services transactions are carried out, and growing complexity of goods and services. Financial services and ecommerce lack sector-specific legislation to protect consumers; while 'grey areas,' which are not sufficiently regulated, continue to exist. Concerns like provision of relevant and comparable information, curbs on misleading advertisements and unscrupulous marketing activities need to be addressed. Moreover, with the advent of internet banking and mobile banking, guidelines on ecommerce should also contain provisions on online payment, use of debit/credit cards etc.

Dispute resolution gains a special character when the transaction is international – appropriate policies should be in place as to jurisdiction, payment settlement and redress.

Data protection is an issue of importance, especially in ecommerce and financial services. Boundaryless transactions and online dealings have brought new challenges and frauds, especially in the context of data protection. Protection of credit details and history of consumers is a major risk, as these can be easily stolen and abused.

Main consumer concerns/issues mobile banking addresses

- consumers wanting to carry out banking transactions had to go to the bank premises in person on through a representative
- consumers had to carry out their banking services only during the banking hours of the bank in which they had their account; beyond that, no banking transactions could take place
- prior to the advent of mobile banking, an enormous amount of paper transactions in various forms such as bank account opening forms, pay-in-slips, cheques, etc used to take place; requiring additional time at their disposal
- there was a crying need for cheaper internet connectivity (in the absence of computing systems such as desktop, laptop etc)
- there was a need to update information such as available balance, details of payments & receipts which should be accessible at any time and in any place

The background/relevant movements in India

Mobile banking was introduced in the Indian financial system sometime in 2010. The pace picked up after demonetization (end of 2016) of high-value currency notes and a focus on gradual paperless financial and banking transactions by adopting a gradual migration to e-payment systems. This reduced dependency on physical paper (real currency or paper bill/notes) and further sped up the adoption of the Point Of Sale (POS), Quick Response (QR) Code by consumers.

The key consumer objectives to be addressed in the relevant standards:

- ✓ Fast & efficient financial transactions
- ✓ Banking services in your pocket
- ✓ Provide a cheaper way to access bank accounts electronically
- ✓ Less time consumption
- ✓ Need for reduction in physical paper
- ✓ Reduce cash dependency

Why is consumer participation needed?

- Bank personnel workload distracts attention from other financial frameworks for efficient banking channels and increased profits
- Routine generation of requirements of consumers such as account statement, account view, payments and receipts is replaced successfully
- Consumers save time that can be used elsewhere

22.2 Summary of current work in the committee of significance

- ✓ Availability of fast and efficient financial transactions
- ✓ Banking at your fingertip
- ✓ Cheaper way of accessing bank accounts
- ✓ Less time consumed
- ✓ No need for physical presence or paper
- ✓ Reduced cash dependency

22.3 Standards work

Committee	Working draft or standard	Consumer representative(s)	Any comment; For example any expected ballot
ISO/TC 68 SC7 WG 10, *Mobile Banking / Payments*		No	

22.4 Relevant links

ISO/TC 68, *Financial services*

ISO/PC 317, *Consumer protection: privacy by design for consumer goods and services*

ISO 10393, *Consumer product recall – Guidelines for suppliers*

A step towards financial inclusion for all with new ISO standards

22.5 Any concern with the standard development

- ✓ No progress of the relevant activities for standardization

22.6 Key person

Professor S.R. Khanna, Consumer Voice, New Delhi, India

23. Consumer vulnerability

23.1 Summary of why this work is important to consumers

Anyone can be vulnerable at any time. Many factors can cause vulnerability, which may place an individual in a situation where they are at greater risk of detriment or harm (financial, psychological, physical) when dealing with an organization.

Organizational processes or procedures can reduce or exacerbate vulnerability and the likelihood of consumer detriment.

Where an organization does not adequately identify and support consumers in vulnerable situations individuals may:

- be at higher risk of experiencing negative outcomes when interacting with suppliers or products and services
- have difficulty obtaining or assimilating information
- be less able to buy, choose or access suitable products
- be more susceptible to certain marketing practices

Vulnerability may be temporary, permanent, short-term, long-term or fluctuating. Factors which may cause vulnerability include, but are not limited to:

Personal circumstances such as

- Addiction e.g. to alcohol, drugs or gambling
- Bereavement
- Caring responsibilities
- Financial e.g. low income, debt, sudden change in income
- Language skills e.g. difficulty communicating, does not speak local language as first language
- Lifestyle changes e.g. moving house, getting married, having a baby, unemployment, divorce, separation
- Limited financial capability, knowledge and skills
- Limited technological capability, knowledge and skills e.g. no access to a mobile phone, internet or computer
- Loneliness / isolation e.g. lives alone, rural isolation
- Low literacy or numeracy
- Old age (might lead to cognitive or sensory impairment)
- Previous victim of a personal data breach, fraud or financial abuse
- Serious illness of self, partner or family member
- Youth (might be associated with inexperience)

Cognitive impairment including

- Brain injury (may be short / long term)
- Dementia e.g. Alzheimer's
- Illness that affects mental capacity (may be short / long term)
- Learning difficulties, e.g. dyslexia
- Mental health issues e.g. depression, bipolar disorder, anxiety

Physical impairment including

- Hearing loss, deafness, tinnitus
- Reduced physical mobility
- Visual impairment

23.2 Summary of current work of significance

ISO/COPOLCO initiated a new work proposal on Consumer Vulnerability in 2017, this was accepted, and ISO/PC 311 was created. The British Standards Institution (BSI) holds the Secretariat.

The first PC 311 meeting was on 14-15 February 2018 at BSI in London. It was well attended with a good balance of consumer, industry and standards representatives. Geographically, the PC has significant representation from Europe, Asia and Canada. However, none from Latin American and African countries.

PC 311 is tasked with setting up a working group to develop a new standard, ISO 22458, on Inclusive Service, based on British Standard 18477:2010. The main purpose of its February 2018 meeting was to:

- give the background on BS 18477 – how the UK developed and subsequently used this, with corporate feedback on implementation, strategies used, and challenges faced (presentation by Julie Hunter who co-authored BS 18477 for BSI)
- define the title and scope of the new ISO standard
- introduce group members; share views and experiences of consumer vulnerability and inclusive service

WG1 was created to draft the standard. However, progress has been slow in developing the first working draft and agreeing dates for a second meeting.

The BSI Consumer & Public Interest Network (BSI-CPIN) has held two Consumer Vulnerability workshops (July 2018 and January 2019) to collaborate with consumer stakeholders and develop a strong consumer position on this topic. Output from the workshops will be fed into the UK Mirror Group of ISO/PC 311 and directly into WG1.

23.3 Summary of why this work is important to consumers

Committee	**Working draft or standard**	**Consumer representative(s)**	**Progress or change during reporting year** **Any action to be taken**
ISO/PC 311, WG 1, *Consumer Vulnerability – Inclusive service – Identifying and responding to consumers in vulnerable situations*	ISO 22458	Julie Hunter, BSI *UNCTAD* Nur Asyikin Aminuddin, DSM Seah Seng Choon, ESG Jeanne Bank, Norma McCormick, Nicki Islic, Patrick Harkness, Jay Jackson, SCC Juha Beurling, SFS Audun Skeidsvoll, SN	Working draft came out in November 2018 – comments submitted by end of January 2019. WG1 meeting to resolve comments has just been scheduled for 15-17 May 2019

23.4 Relevant links

Financial Conduct Authority (FCA) UK

Occasional Paper 8: Consumer Vulnerability

The FCA is due to bring out a consultation paper in the next couple of months on 1) identifying vulnerable consumers and 2) treatment of vulnerable consumers

Lending Standards Board (LSB) UK

- Consumer vulnerability standard which registered firms sign up to
- Vulnerability information for practitioners
- Summary report on six large banks' implementation of vulnerability principles and recommendations

Money Advice Trust UK

- A range of resources for businesses on how to support customers in vulnerable circumstances

BSI White Paper on Vulnerability

- Feedback from service providers on implementing BS 18477

23.5 Information of meetings and consumer participation

Committee	Last meeting	Next meeting	WG / Standard(s)	Consumer representative(s)
ISO/PC 311 *Vulnerable consumers*	2018/02/14-15	2019/05/ 15-17	WG1 ISO 22455	Julie Hunter, BSI CPIN

23.6 Any concern with the standard development

a) **Slow progress** of WG1 Convenor in producing the first working draft, especially as this is based on an existing document (BS 18477)

➢ Recommended action: Being addressed by BSI but needs to be monitored

b) **Current title** of standard is 'Inclusive Service'. There are some problems associated with using the term 'inclusive service' as this suggests that everyone in a vulnerable situation should be given equal / better access to a service. In some cases (children, people with a gambling addiction, people with dementia) it may be necessary to restrict / limit access, so this isn't always the most relevant term. I have suggested changing the title to 'Identifying and responding to consumer vulnerability – requirements for service providers'

➢ Recommended action: BSI-CPIN and ANEC representatives are working together to align comments and will raise this at next WG1 meeting. Any additional support from ISO COPOLCO members is welcome

23.7 Key Person

For further information, please contact:
Julie Hunter at the British Standards Institution