



# STRATEGIC BUSINESS PLAN

## ISO/TC 314

### Ageing Societies

#### EXECUTIVE SUMMARY

ISO/TC 314 was formed to develop standards to address the societal needs of the ageing population and provide guidance to organizations that provide services to this age group.

According to data from World Population Prospects: the 2019 Revision, by 2050, one in six people in the world will be over age 65 (16%), up from one in 11 in 2019 (9%). By 2050, one in four persons living in Europe and Northern America could be aged 65 or over. In 2018, for the first time in history, persons aged 65 or above outnumbered children under five years of age globally. The number of persons aged 80 years or over is projected to triple, from 143 million in 2019 to 426 million in 2050.

IWA 18 “Framework for integrated community – based life-long health and care services in aged societies” provided awareness to the challenges societies face in dealing with the needs of an ageing population. The work program of ISO/TC 314 was developed considering the recommendation of IWA-18 and are considered within the current active work items being developed in three working groups:

- Ageing Societies - Guidelines for an age inclusive workforce
- Ageing Societies - Framework for dementia-inclusive communities
- Ageing Societies – Carer-inclusive and accommodating organizations

It is the intention of ISO/TC314 to add working groups to address issues proposed by participating members to ensure standardization in the field of ageing societies continues to advance.

International standardization can fill a crucial role in supporting societies and organizations by assisting them to provide a consistently high quality of service to ageing societies. This includes enabling members of ageing societies to retain independence in how they live, their decision making and the choices available to them and their families. Indicative of the importance of the topic, relevant standards are already being created by organizations or other existing ISO technical committees. While a number of existing ISO and IEC groups have work areas that may have overlapping interests with ISO/TC 314, the work programme will not be duplicated. The aim moving forward is to continue collaboration and knowledge share by establishing liaisons and joint work programmes where applicable.

This subject area has global implications. Service and product providers along with government services will need to adequately supply the needs and preferences of each nation's ageing population. Countries that are considered as ageing societies\*, rapid ageing societies, or are proactive in developing guidelines for ageing communities will take a more active interest. These include UK, Canada, Japan, Australia, China, Singapore, Sweden, Netherlands, South Korea and the USA, among others.

The COVID-19 pandemic has highlighted the specific challenges and needs faced by older persons during a health crisis. While the pandemic has affected persons of all ages and conditions, evidence indicates that older persons and those with underlying medical conditions are at a higher risk of serious illness and death from the COVID-19 disease. In addition, the pandemic has shone a light on widespread age-based discrimination against older persons, with outcomes ranging from increased isolation to violations to their right to health and life on an equal basis with others.<sup>1</sup> International voluntary standards can play an important role in helping to provide solutions to the issues identified during this global crisis.

ISO/TC 314 highlights the following categories as priority areas:

- Dementia inclusive
- Ageing Workforce
- Health promotion and preventative care in older age
- Social connectedness
- Communities with multi-generational people
- Carer inclusive

ISO/TC 314 considers the below areas require coordination and examination due to possible overlap with other TCs. Within these areas ISO/TC 314 intends to provide support by consultations, cross referencing or complementing exiting work or addressing gaps in the future:

- Universal design standards
- Accessibility standards
- Technologies and systems for an ageing society

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<sup>1</sup> .UN Department of Economic and Social Affairs – Issue Brief : Older Persons and COVID, 2020  
\* <https://www.un.org/en/sections/issues-depth/ageing/>

## 1. INTRODUCTION

### 1.1 *ISO technical committees and business planning*

The extension of formal business planning to ISO Technical Committees (ISO/TCs) is an important measure which forms part of a major review of business. The aim is to align the ISO work programme with expressed business environment needs and trends and to allow ISO/TCs to prioritize among different projects, to identify the benefits expected from the availability of International Standards, and to ensure adequate resources for projects throughout their development.

### 1.2 *International standardization and the role of ISO*

The foremost aim of international standardization is to facilitate the exchange of goods and services through the elimination of technical barriers to trade.

Three bodies are responsible for the planning, development and adoption of International Standards: [ISO](#) (International Organization for Standardization) is responsible for all sectors excluding Electrotechnical, which is the responsibility of [IEC](#) (International Electrotechnical Committee), and most of the Telecommunications Technologies, which are largely the responsibility of [ITU](#) (International Telecommunication Union).

ISO is a legal association, the members of which are the National Standards Bodies (NSBs) of some 164 countries (organizations representing social and economic interests at the international level), supported by a Central Secretariat based in Geneva, Switzerland.

The principal deliverable of ISO is the [International Standard](#).

An International Standard embodies the essential principles of global openness and transparency, consensus and technical coherence. These are safeguarded through its development in an ISO Technical Committee (ISO/TC), representative of all interested parties, supported by a public comment phase (the ISO Technical Enquiry). ISO and its [Technical Committees](#) are also able to offer the ISO Technical Specification (ISO/TS), the ISO Public Available Specification (ISO/PAS) and the ISO Technical Report (ISO/TR) as solutions to market needs. These ISO products represent lower levels of consensus and have therefore not the same status as an International Standard.

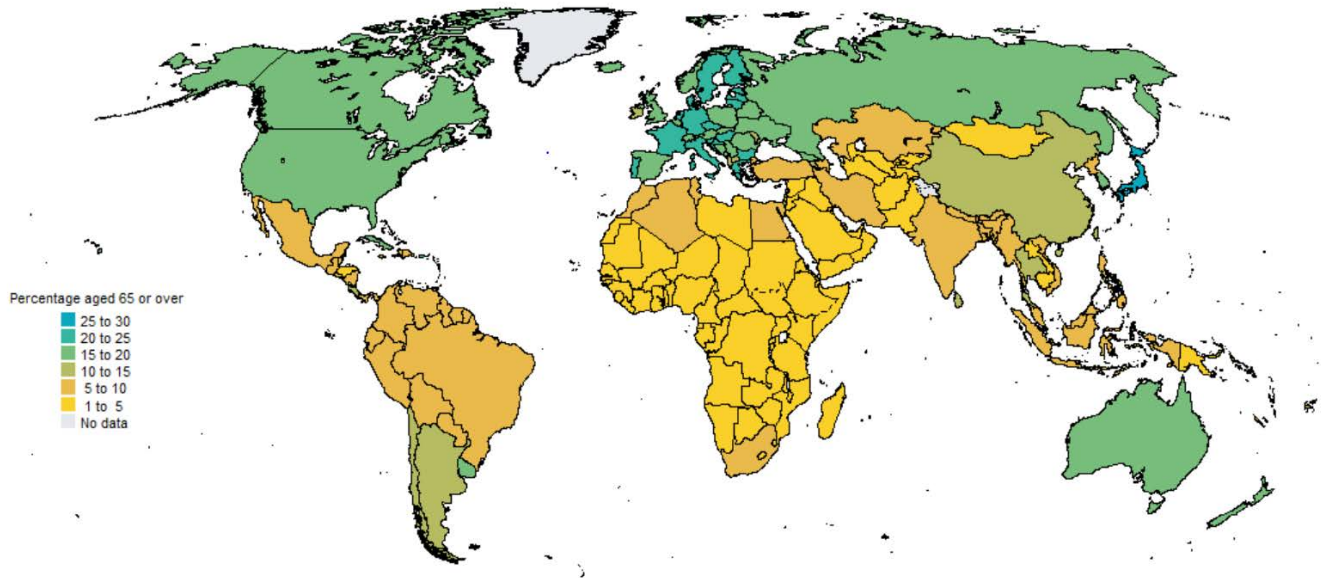
ISO offers also the International Workshop Agreement (IWA) as a deliverable which aims to bridge the gap between the activities of consortia and the formal process of standardization represented by ISO and its national members. An important distinction is that the IWA is developed by ISO workshops and fora, comprising only participants with direct interest, and so it is not accorded the status of an International Standard.

## 2. BUSINESS ENVIRONMENT OF THE ISO/TC

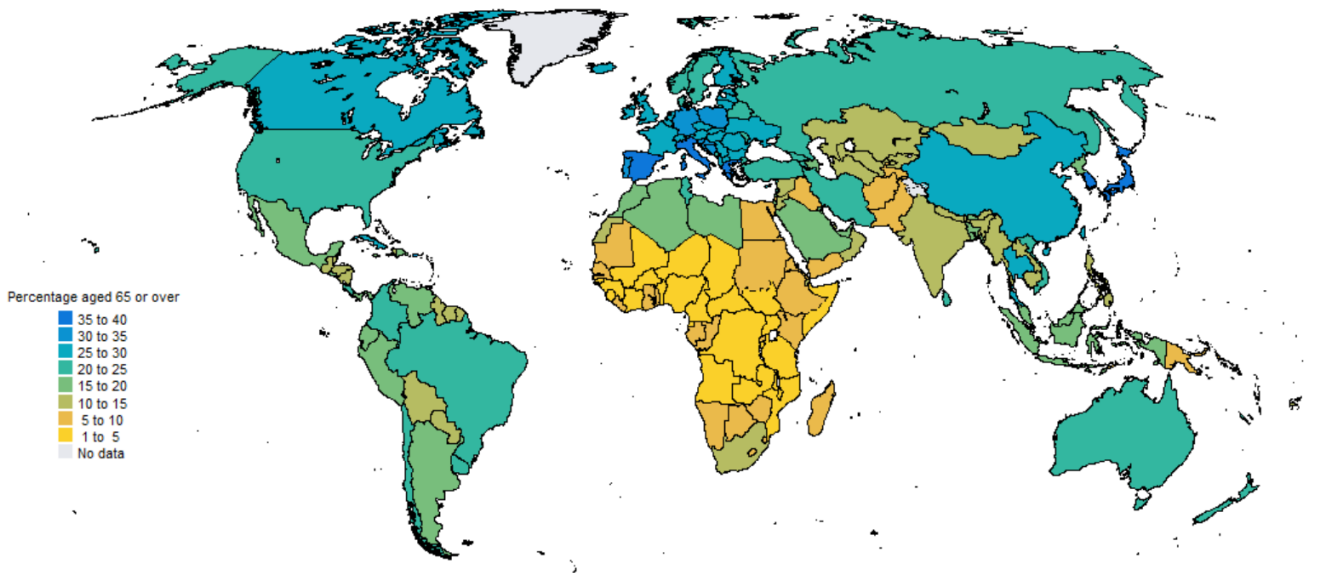
### 2.1 Description of the Business Environment

The following political, economic, technical, regulatory, legal and social dynamics describe the business environment of the industry sector, products, materials, disciplines or practices related to the scope of ISO/TC 314, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards:

Percentage of population aged 65 or over, 2020



Percentage of population aged 65 or over, 2050 (medium-variant projection)



Source: United Nations world map 2020: <https://population.un.org/wpp/Maps/>

As a result of increased life expectancy, ageing or aged societies have emerged in many countries. In addition, developing countries and regions with rapid economic growth will experience ageing over the next few decades. The map above shows the proportion of the populations over the age of 65 for 2020 and the expected increases by 2050. <sup>2</sup> While once considered to be an issue largely confined to a few countries, such as Japan, with advanced demographics, the question of ageing societies<sup>3</sup> is becoming increasingly global.

Whilst the increased ageing of society presents a number of challenges, such as increased pressure on health and social services, there is the potential to identify, document and replicate sustainable practices that will allow people to effectively manage their long-term care, and live a high quality of life independently from institutionalized care nursing homes and hospitals. If there is to be a move away from traditional models of supporting our ageing societies, then innovation will be needed to drive changes. This should be done together with all stakeholders, such as the older persons themselves, their representatives, carers, trade unions, etc. Standards can provide a way of setting out the principles for delivering the new products, services and solutions that will meet the future needs and preferences of our ageing societies in a new environment. The particularly adverse effects of the COVID-19 pandemic on older demographics further underscores the importance of standardization as societies seek new models to ageing societies.

## **2.2 Quantitative Indicators of the Business Environment**

The following discussion of quantitative indicators describes the business environment in order to provide adequate information to support actions of ISO/TC 314:

### **2.2.1 Demographic considerations**

Population ageing is a global phenomenon: virtually every country in the world is experiencing growth in the size and proportion of older persons in their population. There were 703 million persons aged 65 years or over in the world in 2019. Almost 400 million of the population will be aged 80+. The number of older persons is projected to double to 1.5 billion in 2050. Globally, the share of the population aged 65 years or over increased from 6 per cent in 1990 to 9 per cent in 2019. That proportion is projected to rise further to 16 per cent by 2050, so that one in six people in the world will be aged 65 years or over.

Conventional indicators of population ageing that are based on chronological age (years since birth), with a fixed threshold of “old age” at age 65, show that populations are becoming older in all regions of the world. The old-age dependency ratio, the number of persons aged 65 years or above relative to number of persons aged 20 to 64 years, is projected to more than double in Eastern and South-Eastern Asia, Latin America and the Caribbean, Northern Africa and Western Asia, and Central and Southern Asia.

Throughout most of the world, survival beyond age 65 is improving. Globally, a person aged 65 years in 2015-2020 could expect to live, on average, an additional 17 years. By 2045-2050, that figure will have increased to 19 years. Between 2015-2020 and 2045-2050, life expectancy at age 65 is projected to increase in all countries. Women currently outlive men by 4.8 years, but this global gender gap is expected to narrow over the next three decades. Despite these trends towards greater longevity, it is estimated that only 1 in 4 older people in low-and-middle income countries receive a pension. In developing countries 80 % of older people have no regular income.<sup>4</sup>

### **2.2.2 Macroeconomic considerations**

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<sup>2</sup> United Nations world map 2020: <https://population.un.org/wpp/Maps/>

<sup>3</sup> The WHO defines the term “ageing society” as a society where more than 7% are 65 years or older

<sup>4</sup> Age international (2018) <https://www.ageinternational.org.uk/policy-research/statistics/global-ageing/>

Population ageing does not lead inevitably to macroeconomic decline—with well-chosen policies, just the opposite may be true. To maximize the benefits and manage the risks associated with population ageing, governments should support continuing and lifelong education and health care for all; encourage savings behavior and healthy lifestyles throughout the life course; promote employment among women, older persons and others traditionally excluded from the labor force, including through a gradual increase in the official retirement age; and support family-friendly policies to facilitate work-life balance and increased gender equality in both public and private life.<sup>5</sup>

For example, in the Japanese market for older persons of age 65-plus was estimated that it will reach to 100 trillion Japanese yen (approximately US\$1 trillion) by 2025. This market is comprised of the medical industry (35%), care industry (15%) and various daily life-related industries (50%).<sup>6</sup> Meanwhile, in Western Europe and Northwest Asia, researchers estimated that the 60-plus age group will account for 60% of total urban consumption growth in Western Europe and Northeast Asia. This group spends heavily on healthcare, but these consumers will contribute more than 40% of consumption growth in housing, transport, and entertainment in the United States.<sup>7</sup>

Harnessing the consumption power of the older adult market should be continuously developed and modified to meet the changing demographics of older adults. Further, those aged over 60 years will generate more than one third of global consumption growth and more than half of all growth in urban consumption in the coming years. To effectively tap into the potential of an older adult market, commercial businesses need to have a better understanding of older adults as consumers. Without this understanding, there are often gaps in the commercial products and services that may be offered compared to those that older consumers need and want. This is where standards can support businesses.<sup>8</sup>

### **2.2.3 Health and well-being considerations**

While many trends point to a longer, healthier and more productive life for older persons, complications of Ageing, especially dementia are also becoming more prevalent. Worldwide, the WHO reports that around 50 million people have dementia, and there are nearly 10 million new cases every year. Two in three people with dementia live in low- and middle-income countries. Dementia is one of the major causes of disability and dependency among older people worldwide. It can be overwhelming, not only for people who have dementia, but also for their caregivers and families, who globally provide most of the care and support. There is often a lack of awareness and understanding of dementia, resulting in stigmatization and barriers to diagnosis and care. The impact of dementia on carers, family and society at large can be physical, psychological, social and economic.

Nearly two thirds (58%) of 50 million people with dementia live in low- and middle-income countries. In 2018, the cost of dementia was estimated at one trillion dollars. Every 3 seconds someone develops dementia. By 2050, 152 million will be living with the condition.<sup>9</sup> As was evident during the recent COVID-19 Pandemic, a higher portion of the ageing population was affected, which exposed some of the critical vulnerabilities of individuals with dementia. Meanwhile, the prevalence of disability among persons under 18 years is 5.8%; among 65 to 74 years old, this rate increases to 44.6%; and when we review this for persons aged 85 and older this the rate climbs to 84.2%.

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<sup>5</sup> United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Ageing 2019: Highlights (ST/ESA/SER.A/430)

<sup>6</sup> Mizuho Bank of Japan (2018) [https://www.mizuho.com/corporate/bizinfo/industry/sangyou/pdf/1039\\_03\\_03.pdf](https://www.mizuho.com/corporate/bizinfo/industry/sangyou/pdf/1039_03_03.pdf) (in Japanese)

<sup>7</sup> R. Dobbs, J. Remes and J. Woetzel (2018) in Harvard Business Review. <https://hbr.org/2016/07/emerging-demographics-are-the-new-emerging-markets>

<sup>8</sup> APEC paper (2017) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5894246/>

<sup>9</sup> Alzheimer's Disease International: <https://www.alz.co.uk/research/statistics>

COVID-19 has shown that older persons are confronted with higher risks during a global health crisis. The pandemic has also highlighted the economic contribution of informal carers. For example, it is estimated that unpaid carers provide care that would cost the Canadian health care system around \$30 billion per year. Many of these unpaid carers are working and as the population ages, it will be critical to provide appropriate support and recognition to meet the needs of these carers to keep our health care systems sustainable, but also to improve and strengthen economic productivity.

### **3. BENEFITS EXPECTED FROM THE WORK OF THE ISO/TC**

ISO/TC 314 will mobilize the unique assets of the ISO system to develop standards which support the inclusion of older persons in workplaces, communities and health care facilities.

While much of the experience of Ageing is defined by national laws, including pension regimes, mandatory retirement, the wider and more common experience of Ageing is taking place at a global level, which calls for the development of international standards in areas where common experiences predominate.

The ISO system, through the work of ISO/TC 314 allows for the perspectives of older persons to be considered in the development and revision of a highly diverse mix of international standards, encompassing information technology, medical devices, workplace health and safety, lighting and disaster response.

Beyond the inclusion of ageing societies perspectives in the development of product, service and management system standards, ISO/TC 314 will focus on developing a package of standards within the TC's own scope representing global consensus on the optimum degree of order for the participation of older persons in workplaces, communities and health care facilities. The standards development process, by design, is inclusive of the views of older persons themselves, as well as those of the institutions, authorities, businesses and communities that play a role in their optimal well-being. The consensus principle, inherent in standardization provides for greater engagement and for a stronger voice for older persons in the development of standards that will have an impact on their well-being. More specifically, standardization in the area of ageing societies is expected to deliver a range of benefits for different stakeholders:

#### *Older persons and their families*

- providing credibility and value of products and services at a faster and higher-quality rate;
- providing new/ better employment opportunities, which will improve their general wellness
- representing the users of products and services to influence organizations and research institutions. Influencing organizations and research institutions in the standards development process to offer the direction based on user feedback.

#### *Providers*

- for service providers – closer alignment in service quality standards and consistency in service expectations on an international level;
- for product manufacturers – support trade to international markets with standardized products and services focused on older persons. Encourage innovation and product development and introduction into a wide range of service settings;
- for innovation bodies (global) – discussions on how innovation can support services for lifelong care providers can be escalated to an international standards platform and incorporated into new work areas that will translate to wider social benefits;
- for healthcare specialists – establish consistency in delivery of health care services that is fit for purpose. Health research and services – develop more research projects in collaboration with other countries and offer findings to be considered for inclusion in new international standards.

#### *Carers*

- for carers the standard in development will be beneficial as organizations will have access to best practices to adjust their processes and be more aware of their needs.

#### *International organizations*



- for international organizations focusing on public health (e.g. WHO and OECD) – international strategies can be closely aligned with global standards priorities to better support ageing societies;
- for international organizations for healthcare services – more international collaboration can help ensure best practice is shared and that the needs of different regions are better known, understood, communicated and shared.

#### *Enterprises and organizations*

- If older persons can remain in the organization for a longer period it reduces the risk of knowledge loss and associated costs;
- Standards can support measures to make it easier for older workers to actively participate and stay in the labour market and strengthen a culture of responsibility, commitment, respect and dignity in all workplaces where all workers are valued as important irrespective of age.

#### *Governments and communities*

- for national governments – able to exchange and promote national objectives for ageing society initiatives including seeking common solutions together with other nations,
- for local communities: support development of policy measures to be inclusive to live with of older persons while sustaining vitality and attractiveness of the community,
- increased participation in society reduces social isolation and improves wellbeing with less reliance on government spending and generates an increased tax revenue.

### **Sustainability Considerations**

ISO Guide 82 defines sustainable development as a development approach that addresses the environmental, social and economic needs of the present without compromising the ability of future generations to meet their own needs. At an organizational level, sustainable development can be addressed through the application of social responsibility concepts, using ISO 26000. ISO 26000 provides a series of actions and expectations for socially responsible organizations, considering human rights, labor practices, the environment, operating practices, consumer issues and community involvement / development.

The proposed work programme of ISO/TC 314 will support the effective application of ISO 26000 through many of its projects, including, but not limited to:

- An organizational-level perspective, establishing normative requirements and recommendations that contribute to macro-level sustainability indicators;
- Workplace standards that promote the active participation of older persons in employment;
- Community standards that are inclusive of those with dementia and other vulnerable populations of older persons.

Through its standardization work and liaison with other ISO committees, ISO/TC 314 will ensure that the perspective of stakeholders representing ageing persons are represented across different economic and social spectra;

The critical interface between ISO/TC 314 standards, ISO 26000 and the UN SDGs depends on several factors, including:

- Production of timely, credible and consensus-driven documents in keeping with the 2030 ISO Strategy;
- National adoption and application of ISO/TC 314 standards across a wide number of developed and developing countries;
- Adequate financing from public authorities and private institutions;
- Stakeholder engagement and influence.

Through the application of the principles of ISO 26000, the work created by ISO/TC 314 is expected to contribute to nine UN SDGs. So far, the existing work programme is aimed to support the goals as set out below:

	1. No Poverty	3. Good health and well-being	4. Quality education	5. Gender equality	8. Decent work & economic growth	9. Industry, innovation & infrastructure	10. Reduced inequality	11. Sustainable Cities & Communities	17. Partnerships to achieve the Goal.
TC314	✓	✓	✓	✓	✓	✓	✓	✓	✓
Age inclusive workforce	✓	✓	✓	✓	✓	✓	✓		✓
Dementia inclusive communities		✓				✓	✓	✓	✓
Carer inclusive organizations	✓	✓		✓	✓	✓	✓	✓	✓

The standards developed by ISO/TC 314 are expected to directly respond to several UN SDGs sub-goals including:

- 3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being
- 8.8 Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment
- 10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status
- 11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons
- 11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities

Taking the above into mind, the sustainability strategy for ISO/TC 314 will work towards the following objectives:

- Including normative references to applicable standards that cover social responsibility issues, such as ISO 26000:2010, particularly for issues under the core subjects of human rights, labor practices, consumer issues and community involvement;
- Integrating specific references to relevant SDGs, sub-goals and indicators in its deliverables;
- Recognizing the gendered aspect of caring and including guidance on applying a sex/gender lens when developing workplace policies and practices to support working carers;
- Communicating the importance of voluntary, consensus-based standards as part of the global effort to achieve the SDGs.

## 4. REPRESENTATION AND PARTICIPATION IN THE ISO/TC

### 4.1 Membership

Countries/ISO member bodies that are P and O members of the ISO committee can be found here:

<https://www.iso.org/committee/6810883.html>

### 4.2 Analysis of the participation

It is worth noting that the TC's membership currently is concentrated in developed countries, as these countries are where ageing populations are mostly concentrated. Nevertheless, as ageing continues as a global trend, the engagement of more developing and transitional countries will be essential for the TC's work. As the work of the TC is only just launching, we expect that more countries will participate in the future.

In July 2020 the participating countries included:

Participating members (20)	Observing members (18)
Australia	Argentina
Austria	Belgium
Canada	Cyprus
China	Czech Republic
Finland	Denmark
France	Ecuador
Germany	India
Iran, Islamic Republic of	Italy
Ireland	Malaysia
Israel	Netherlands
Japan	New Zealand
Korea, Republic of	Peru
Norway	Portugal
Singapore	Senegal
Sweden	Serbia
Switzerland	Slovakia
Thailand	Spain
Uganda	Viet Nam
United Kingdom	

In addition to new standards being developed for specific needs, this TC also has an important task to communicate with other ISO TCs to ensure that the views of an ageing society are considered while drafting standards within their field of expertise.

The TCs under consideration by ISO/TC 314 for a potential or existing liaison relationship are:

<b>Existing Internal Liaisons</b>	<ul style="list-style-type: none"> <li>▪ ISO/TC 43 Acoustics</li> <li>▪ ISO/TC 94 Personal safety - Protective clothing and equipment</li> <li>▪ ISO/TC 159 Ergonomics</li> <li>▪ ISO/TC 159/SC 3 Anthropometry and biomechanics</li> <li>▪ ISO/TC 159/SC 5 Ergonomics of the physical environment</li> <li>▪ ISO/TC 173 Assistive products</li> <li>▪ ISO/TC 249 Traditional Chinese medicine</li> <li>▪ ISO/TC 260 Human resources management</li> <li>▪ ISO/TC 268 Sustainable cities and communities</li> <li>▪ ISO/TC 268/SC 1 Smart community infrastructures</li> <li>▪ </li> </ul>
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	<ul style="list-style-type: none"> <li>▪ ISO/TC 274 Light and lighting</li> <li>▪ ISO/TC 283 Occupational health and safety management</li> <li>▪ IEC SyC AAL Active Assisted Living</li> <li>▪ ISO/PC 311 Vulnerable consumers</li> <li>▪ CEN Advisory Board on Healthcare standards (ABHS)</li> </ul>
<b>Existing External Liaisons</b>	<ul style="list-style-type: none"> <li>▪ Organisation for Economic Co-operation and Development</li> <li>▪ European Commission</li> <li>▪ CIE - International commission on illumination</li> <li>▪ EAN - International Article Numbering Association</li> <li>▪ ETUC - The European Trade Union Confederation</li> <li>▪ ILO</li> <li>▪ Business Europe</li> <li>▪ APEC silver economy</li> <li>▪ UN OEWG on ageing</li> </ul>
<b>Liaisons from ISO/TC 314</b>	<ul style="list-style-type: none"> <li>▪ IEC/SyC AAL Active Assisted Living</li> <li>▪ ISO/TC 215 Health informatics</li> <li>▪ ISO/TC 268 Sustainable cities and communities</li> <li>▪ ISO/TC 304 Healthcare organization management</li> </ul>
<b>Priority Future Liaisons</b>	<ul style="list-style-type: none"> <li>▪ ISO/IEC JTC 1 WG 11 Smart cities</li> <li>▪ World Health Organisation</li> </ul>
<b>Other Future / Potential Liaisons</b>	<ul style="list-style-type: none"> <li>▪ ISO/IEC JTC 1 ISO/IEC Joint Technical Committee for Information Technology</li> <li>▪ ISO/IEC JTC 1/SC 27 IT Security techniques</li> <li>▪ ISO/IEC JTC 1/SC 28 Office equipment</li> <li>▪ ISO/IEC JTC 1/SC 35 User interfaces</li> <li>▪ ISO/IEC JTC 1/SC 36 Information technology for learning, education and training</li> <li>▪ ISO/IEC JTC 1/SC 6 Telecommunications and information exchange between systems</li> <li>▪ ISO/TC 37 Terminology and other language and content resources</li> <li>▪ ISO/TC 59/SC 16 Accessibility and usability of the built environment</li> <li>▪ ISO/TC 68 Financial services</li> <li>▪ ISO/TC 68/SC 2 Financial Services, security</li> <li>▪ ISO/TC 68/SC 7 Core banking</li> <li>▪ IEC/TC 79 Alarm and electronic security systems</li> <li>▪ ISO/TC 121 Anaesthetic and respiratory equipment</li> <li>▪ ISO/TC 121/SC 3 Lung ventilators and related equipment</li> <li>▪ ISO/TC 145 SC 1 &amp; SC 2</li> <li>▪ ISO/TC 176/SC 3 Supporting technologies</li> <li>▪</li> <li>▪ ISO/TC 222 Personal financial planning</li> <li>▪ ISO/TC 225 Market, opinion and social research</li> <li>▪ ISO/TC 229 Nanotechnologies</li> <li>▪ ISO/TC 232 learning services outside of formal education</li> <li>▪ ISO/TC 292 Security and resilience</li> <li>▪ ISO/TC 299 Robotics</li> <li>▪</li> </ul>

Besides this list of TCs and organizations and in order to avoid duplicative efforts, a list of standards and documents has been collated, that might reflect issues that are important and complimentary to the work done by ISO/TC 314. The list, attached in the Annex of this document, should be seen as an “open list”, which the working groups of this TC will engage with and account for during the development process of new standards.

## 5. OBJECTIVES OF THE ISO/TC AND STRATEGIES FOR THEIR ACHIEVEMENT

### 5.1 *Defined objectives of the ISO/TC*

IWA 18 “Framework for integrated community – based life-long health and care services in aged societies” provided awareness to the challenges societies face in dealing with the needs of an ageing population. This work was further supported by the creation of a strategic advisory group (SAG) within the TC, which was tasked to further identify the priority areas for standardization efforts. The work program of ISO/TC 314 was developed considering the recommendations of IWA 18 and the SAG report of 2017.

The highlighted areas for development are:

#### *Dementia inclusive*

- Develop a guidance standard to provide good practice on achieving dementia friendly communities
- To give consideration for other standards to be developed that can also benefit other long-term mental health conditions of a chronic or progressive nature in a community care setting or home care setting.

#### *Ageing workforce*

- Longer working lives bring significant benefits to individuals, employers, volunteer organizations and wider community. International standardization for ageing workforces will provide tools regarding workplace and jobs design and redesign, workplace technologies, and working practices to maximize employability opportunities.

#### *Health promotion and preventative care in older age*

- The main focus will be on preventing geriatric syndromes, cognitive decline and chronic diseases (e.g. diabetes, depression, hypertension, hyperlipemia, coronary artery disease) in ageing populations, maintaining activities of daily living and functioning and autonomy (for example fall prevention or medication error, preventative nutrition);
- This includes promoting active ageing through lifelong learning and active participation in society.

#### *Social connectedness*

- Infrastructure facilities, specific technology to support ageing societies, guidelines for city planners to reduce social isolation within the community. Guidelines for smart cities and rural areas. Measures to avoid social exclusion.

#### *Multi-generational communities*

- Integrated community support services.

#### *Carers inclusive organizations*

- Training, education, and communication.

The lower priority areas listed below are more likely to be subject to potential overlap with other TCs. Standards in these areas careful consideration to understand the best place for their development. For existing developments in another TC, ISO/TC 314 needs to consider how to provide support to ensure older peoples’ interests are given adequate thought:

#### *Universal design standards*

- Universal Design (also known as lifelong design/design for all/inclusive design) is the design and composition of an environment, products and services to be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability.
- Physical and graphical user interface.
- Ergonomics for ageing societies.

*Accessibility standards*

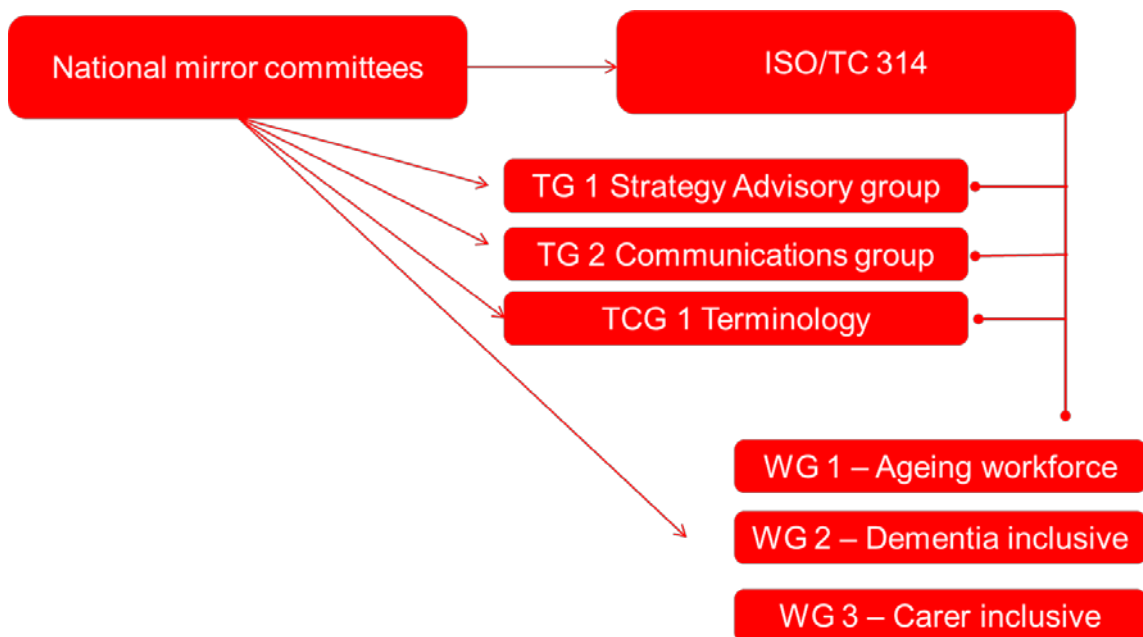
- Collaboration with existing TCs to ensure consideration is given to the ageing society. This can be through review of current/developing standards or joint work on new emerging areas. This subject can include aspects of service delivery, design, education and more.

*Technologies and systems for an ageing society*

- Integrated devices;
- Future technology;
- Prescription services / GP services / apps;
- Overall service standards to incorporate the framework of connectivity between wearable, medical devices and equipment.

**5.2 Identified strategies to achieve the ISO/TC’s defined objectives**

ISO/TC 314 has the following set-up:



The intention is that a yearly face to face meeting will take place for ISO/TC 314. These plenary meetings will focus on the overall strategic direction of the committee and progressing on important decisions or discussions. WG and TG meetings will take place when appropriate to meet deadlines.

The committee’s work-program will slowly expand as by the topic areas specified in section 5.1. However, to ensure the workload is sustainable, priority areas for suggested new work items and key liaisons with other TCs have been considered.

## **6. FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE ISO/TC WORK PROGRAMME**

As the committee is at an early stage, we are awaiting more experts to join the national mirror committees to ensure there is varied representation and enough resources will be available when the work program expands. As presented in section 2, the question of ageing societies is a global issue, therefore, we urge the participation of countries in all stages of the demographic pyramid. Some examples of national representation which are yet to participate in the committee: Russia, Belarus, Ukraine, Poland, Turkey, Brazil, Colombia, Chile, etc.

Existing ISO and IEC groups with potential overlapping areas with ISO/TC 314 have been identified. To avoid these overlaps, ISO/TC 314 will work in the following manner:

If ISO/TC 314 believes that the development of an International Standard is needed and there is a possibility of duplication of work, then it shall:

- Comprehensively discuss with the relevant TCs. If there is no interest of them then,
- Produce an international standard by itself.

Different legislative frameworks, regulations and customary practices exist in each nation around ageing societies. The TC will be mindful of such differences even though standards established are voluntary in its adoption and application. This is to ensure that the standards are globally acceptable and applicable. The ISO/TC 314 will:

- Create deliverables that are generic and neutral about legislation, regulations and customary practice.
- Provide information about good practices that are referred by each nation.

## 7. STRUCTURE, CURRENT PROJECTS AND PUBLICATIONS OF THE ISO/TC

### ***Information on ISO online***

The link below is to the TC's page on ISO's website:

<https://www.iso.org/committee/6810883.html>

Click on the tabs and links on this page to find the following information:

About (Secretariat, Secretary, Chair, Date of creation, Scope, etc.)

Contact details

Structure (Subcommittees and working groups)

Liaisons

Meetings

Tools

Work programme (published standards and standards under development)

### ***Reference information***

[\*\*\*Glossary of terms and abbreviations used in ISO/TC Business Plans\*\*\*](#)

[\*\*\*General information on the principles of ISO's technical work\*\*\*](#)

[ISO online browsing platform](#)



## **ANNEX A: Standardisation groups and standards in the area of human-centered design (non-inclusive list)**

### **Standardisation groups**

#### **ISO, IEC, ITU**

ISO/IEC Guide 71:2014: Guide for addressing accessibility in standards

#### **ISO/TC 59/SC 16 Accessibility and usability of the built environment**

ISO 21542:2011: Building construction — Accessibility and usability of the built environment

#### **ISO/TC 159 Ergonomics**

ISO/TR 22411:2008: Ergonomics data and guidelines for the application of ISO/IEC Guide 71 to products and services to address the needs of older persons and persons with disabilities

#### **ISO/TC 159/SC 1 General ergonomics principles**

ISO 6385:2016: Ergonomics principles in the design of work systems

ISO 10075-1:2017: Ergonomic principles related to mental workload -- Part 1: General issues and concepts, terms and definitions

ISO 10075-2:1996: Ergonomic principles related to mental workload -- Part 2: Design principles

ISO 10075-3:2004: Ergonomic principles related to mental workload -- Part 3: Principles and requirements concerning methods for measuring and assessing mental workload

ISO 26800:2011: Ergonomics -- General approach, principles and concepts

ISO 27500:2016: The human-centered organization -- Rationale and general principles

ISO/DIS 27501 [Under development]: The human-centered organization -- Guidance for managers

#### **ISO/TC 159/SC 3 Anthropometry and biomechanics**

ISO 7250-1:2017: Basic human body measurements for technological design -- Part 1: Body measurement definitions and landmarks

ISO/TR 7250-2:2010: Basic human body measurements for technological design -- Part 2: Statistical summaries of body measurements from national populations

ISO 7250-3:2015: Basic human body measurements for technological design -- Part 3: Worldwide and regional design ranges for use in product standards

ISO 11226:2000: Ergonomics -- Evaluation of static working postures

ISO 11228-1:2003: Ergonomics -- Manual handling -- Part 1: Lifting and carrying

ISO 11228-2:2007: Ergonomics -- Manual handling -- Part 2: Pushing and pulling

ISO 11228-3:2007: Ergonomics -- Manual handling -- Part 3: Handling of low loads at high frequency

ISO/TR 12296:2012: Ergonomics -- Manual handling of people in the healthcare sector

ISO 14738:2002: Safety of machinery -- Anthropometric requirements for the design of workstations at machinery

ISO 15534-1:2000: Ergonomic design for the safety of machinery -- Part 1: Principles for determining the dimensions required for openings for whole-body access into machinery

ISO 15534-2:2000: Ergonomic design for the safety of machinery -- Part 2: Principles for determining the dimensions required for access openings

ISO 15534-3:2000: Ergonomic design for the safety of machinery -- Part 3: Anthropometric data

ISO 15535:2012: General requirements for establishing anthropometric databases

ISO 15536-1:2005: Ergonomics -- Computer manikins and body templates -- Part 1: General requirements

ISO 15536-2:2007: Ergonomics -- Computer manikins and body templates -- Part 2: Verification of functions and validation of dimensions for computer manikin systems

ISO 15537:2004: Principles for selecting and using test persons for testing anthropometric aspects of industrial products and designs

ISO/TS 20646:2014: Ergonomics guidelines for the optimization of musculoskeletal workload

ISO 20685:2010: 3-D scanning methodologies for internationally compatible anthropometric databases

ISO/DIS 20685-1 [Under development]: Ergonomics -- 3-D scanning methodologies for internationally compatible anthropometric databases -- Part 1: Evaluation protocol for body dimensions extracted from 3-D body scans

ISO 20685-2:2015: Ergonomics -- 3-D scanning methodologies for internationally compatible anthropometric databases -- Part 2: Evaluation protocol of surface shape and repeatability of relative landmark positions

ISO/AWI TR 23076 [Under development]: Ergonomics -- Recovery Model for cyclical industrial work

## **ISO/TC 159/SC 4 Ergonomics of human-system interaction**

ISO 9241-1:1997: Ergonomic requirements for office work with visual display terminals (VDTs) -- Part 1: General introduction

ISO 9241-2:1992: Ergonomic requirements for office work with visual display terminals (VDTs) -- Part 2: Guidance on task requirements

ISO 9241-5:1998: Ergonomic requirements for office work with visual display terminals (VDTs) -- Part 5: Workstation layout and postural requirements

ISO 9241-6:1999: Ergonomic requirements for office work with visual display terminals (VDTs) -- Part 6: Guidance on the work environment

ISO 9241-11:2018: Ergonomics of human-system interaction -- Part 11: Usability: Definitions and concepts

ISO 9241-13:1998: Ergonomic requirements for office work with visual display terminals (VDTs) -- Part 13: User guidance

ISO 9241-14:1997: Ergonomic requirements for office work with visual display terminals (VDTs) -- Part 14: Menu dialogues

ISO 9241-15:1997: Ergonomic requirements for office work with visual display terminals (VDTs) -- Part 15: Command dialogues

ISO 9241-16:1999: Ergonomic requirements for office work with visual display terminals (VDTs) -- Part 16: Direct manipulation dialogues

ISO 9241-20:2008: Ergonomics of human-system interaction -- Part 20: Accessibility guidelines for information/communication technology (ICT) equipment and services

ISO/TR 9241-100:2010: Ergonomics of human-system interaction -- Part 100: Introduction to standards related to software ergonomics

ISO 9241-110:2006: Ergonomics of human-system interaction -- Part 110: Dialogue principles

ISO/AWI 9241-110 [Under development]: Ergonomics of human-system interaction -- Part 110: Principles for user-system interaction

ISO 9241-112:2017: Ergonomics of human-system interaction -- Part 112: Principles for the presentation of information

ISO 9241-125:2017: Ergonomics of human-system interaction -- Part 125: Guidance on visual presentation of information

ISO/AWI TS 9241-126 [Under development]: Ergonomics of human-system interaction -- Part 126: Guidance on the presentation of auditory information

ISO 9241-129:2010: Ergonomics of human-system interaction -- Part 129: Guidance on software individualization

ISO 9241-143:2012: Ergonomics of human-system interaction -- Part 143: Forms

ISO 9241-154:2013: Ergonomics of human-system interaction -- Part 154: Interactive voice response (IVR) applications

ISO 9241-161:2016: Ergonomics of human-system interaction -- Part 161: Guidance on visual user-interface elements

ISO 9241-171:2008: Ergonomics of human-system interaction -- Part 171: Guidance on software accessibility

ISO 9241-210:2010: Ergonomics of human-system interaction -- Part 210: Human-centred design for interactive systems

ISO/FDIS 9241-220 [Under development]: Ergonomics of human-system interaction -- Part 220: Processes for enabling, executing and assessing human-centred design within organizations

ISO 9241-400:2007: Ergonomics of human-system interaction -- Part 400: Principles and requirements for physical input devices

ISO 9241-410:2008: Ergonomics of human-system interaction -- Part 410: Design criteria for physical input devices

ISO/DIS 9241-500 [Under development]: Ergonomics of human-system interaction -- Part 500: Ergonomic principles for the design and evaluation of environments of interactive systems

ISO/AWI TR 9241-530 [Under development]: Ergonomics of human-system interaction -- Part 530: Recommendations for the design of non-touch gestural input for the reduction of biomechanical stress

ISO 9241-910:2011: Ergonomics of human-system interaction -- Part 910: Framework for tactile and haptic interaction

ISO 9241-920:2009: Ergonomics of human-system interaction -- Part 920: Guidance on tactile and haptic interactions

ISO 9241-940:2017: Ergonomics of human-system interaction -- Part 940: Evaluation of tactile and haptic interactions

ISO 9241-960:2017: Ergonomics of human-system interaction -- Part 960: Framework and guidance for gesture interactions

ISO/AWI 9241-971 [Under development]: Ergonomics of human system interaction -- Part 971: Guidance on physical (tactile/haptic) accessibility of ICT

ISO 14915-1:2002: Software ergonomics for multimedia user interfaces -- Part 1: Design principles and framework

ISO 14915-2:2003: Software ergonomics for multimedia user interfaces -- Part 2: Multimedia navigation and control

ISO 14915-3:2002: Software ergonomics for multimedia user interfaces -- Part 3: Media selection and combination

ISO/TR 16982:2002: Ergonomics of human-system interaction -- Usability methods supporting human-centred design

ISO/TS 18152:2010: Ergonomics of human-system interaction -- Specification for the process assessment of human-system issues

ISO/TR 18529:2000: Ergonomics -- Ergonomics of human-system interaction -- Human-centred lifecycle process descriptions

ISO/AWI TS 21054 [Under development]: Ergonomics -- Accessible design -- input controls of consumer products

ISO/CD 21055 [Under development]: Ergonomics -- Accessible Design - Minimum legible font size for people at any age

ISO/DIS 21056 [Under development]: Ergonomics -- Accessible design -- Guidelines for designing tactile symbols and letters

ISO/CD 24500-1 [Under development]: Ergonomics -- Accessible design -- Part 1: Indicator lamps on consumer products

ISO/CD 24500-2 [Under development]: Ergonomics -- Accessible design -- Auditory signals -- Part 2: Voice guides for consumer products

ISO/CD 24500-3 [Under development]: Ergonomics -- Accessible design -- Part 3: Accessibility of digital information visually displayed on consumer products

ISO 24503:2011: Ergonomics -- Accessible design -- Tactile dots and bars on consumer products

ISO/DIS 24507 [Under development]: Ergonomics -- Accessible design -- Doors and handles of consumer products

### **ISO/TC 173 Assistive products**

ISO/AWI 10535 Hoists for the transfer of disabled persons -- Requirements and test methods

ISO/AWI 11199-1 Walking aids manipulated by both arms -- Requirements and test methods -- Part 1: Walking frames

ISO/AWI 11199-2 Walking aids manipulated by both arms -- Requirements and test methods -- Part 2: Rollators

ISO 19894 Walking trolleys -- Requirements and test methods

ISO 20342-1 Assistive products for tissue integrity when lying down -- Part 1: General requirements

ISO/DIS 21801 General guidelines on cognitive accessibility

ISO/AWI 21856 Assistive products for persons with disability -- General requirements and test methods

## **ISO/IEC JTC 1/SC 35 User interfaces**

ISO/IEC 13066-1:2011 Information technology – Interoperability with assistive technology (AT) – Part 1: Requirements and recommendations for interoperability

ISO/IEC 15412:1999: Information technology -- Portable computer keyboard layouts

ISO/IEC TR 15440:2016: Information technology -- Future keyboards and other input devices and entry methods

ISO/IEC CD 17549-1 [Under development]: Information technology -- User interface guidelines on menu navigation -- Part 1: Framework

ISO/IEC 17549-2:2015: Information technology -- User interface guidelines on menu navigation -- Part 2: Navigation with 4-direction devices

ISO/IEC WD 17549-3 [Under development]: Information technology -- User interface guidelines on menu navigation -- Part 3: Navigation with 1-direction devices

ISO/IEC TR 19764:2005: Information technology -- Guidelines, methodology and reference criteria for cultural and linguistic adaptability in information technology products

ISO/IEC TR 20007:2014: Information technology -- Cultural and linguistic interoperability -  
- Definitions and relationship between symbols, icons, animated icons, pictograms, characters and glyphs

ISO/IEC TS 20071-11:2012: Information technology -- User interface component accessibility -- Part 11: Guidance for alternative text for images

ISO/IEC TS 20071-15:2017: Information technology -- User interface component accessibility -- Part 15: Guidance on scanning visual information for presentation as text in various modalities

ISO/IEC TS 20071-21:2015: Information technology -- User interface component accessibility -- Part 21: Guidance on audio descriptions

ISO/IEC FDIS 20071-23 [Under development]: Information technology -- User interface component accessibility -- Part 23: Visual presentation of audio information (including captions and subtitles)

ISO/IEC TS 20071-25:2017: Information technology -- User interface component accessibility -- Part 25: Guidance on the audio presentation of text in videos, including captions, subtitles and other on-screen text

ISO/IEC 20382-1:2017 Information technology – User interfaces – Face-to-face speech translation – Part 1: User interface

ISO/IEC 20382-2:2017 Information technology – User interfaces – Face-to-face speech translation – Part 2: System architecture and functional components

ISO/IEC AWI 22121-1 [Under development]: Information technology -- Virtual keyboards user interfaces -- Part 1: Generic interface

ISO/IEC AWI 22121-2 [Under development]: Information technology -- Virtual keyboards user interfaces -- Part 2: Virtual keyboards interactions

ISO/IEC/AWI 23836 Information technology - User interfaces – Universal interface for human language selection

ISO/IEC 24756:2009 Information technology – Framework for specifying a common access profile (CAP) of needs and capabilities of users, systems, and their environments

ISO/IEC 24786:2009: Information technology -- User interfaces -- Accessible user interface for accessibility settings

ISO/IEC 29136:2012: Information technology -- User interfaces -- Accessibility of personal computer hardware

ISO/IEC FDIS 29138-1 [Under development]: Information technology -- User interface accessibility -- Part 1: User accessibility needs

ISO/IEC DIS 30071-1 [Under development]: Information technology -- Development of user interface accessibility -- Part 1: A code of practice for creating accessible ICT products and services

ISO/IEC/CD 30113-60 Information technology – Gesture-based interfaces across devices and methods – Part 60: General guidance on gestures for screen readers

ISO/IEC/CD 30113-61 Information technology – Gesture-based interfaces across devices and methods – Part 61: Single-point gestures for screen readers

ISO/IEC 30122-1:2016 Information technology – User interfaces – Voice commands – Part 1: Framework and general guidance

ISO/IEC/TR 13066-2:2016 Information technology -- Interoperability with assistive technology (AT) -- Part 2: Windows accessibility application programming interface (API)

ISO/IEC/TR 13066-3:2012 Information technology -- Interoperability with assistive technology (AT) -- Part 3: IAccessible2 accessibility application programming interface (API)

ISO/IEC/TR 13066-4:2015 Information technology -- Interoperability with assistive technology (AT) -- Part 4: Linux/UNIX graphical environments accessibility API

ISO/IEC/TR 13066-6:2014 Information technology -- Interoperability with Assistive Technology (AT) -- Part 6: Java accessibility application programming interface (API)

ISO/IEC/AWI 23773-2 User interface -- Simultaneous Interpretation System -- Part 2: Requirements and functional description

ISO/IEC/AWI 23773-3 User interface -- Simultaneous interpretation system -- Part 3: System architecture

ISO/IEC 24752-1:2014 Information technology -- User interfaces -- Universal remote console -- Part 1: General framework

ISO/IEC 24752-2:2014 Information technology -- User interfaces --

Universal remote console -- Part 2: User interface socket description  
ISO/IEC 24752-4 : 2014 Information technology -- User interfaces --  
Universal remote console -- Part 4: Target description  
ISO/IEC 24752-5 : 2014 Information technology -- User interfaces --  
Universal remote console -- Part 5: Resource description  
ISO/IEC 24752-6 : 2014 Information technology -- User interfaces --  
Universal remote console -- Part 6: Web service integration  
ISO/IEC 24752-8 : 2018 Information technology -- User interfaces --  
Universal remote console -- Part 8: User interface resource framework  
ISO/IEC 30122-2 : 2017 Information technology -- User interfaces -- Voice  
commands -- Part 2: Constructing and testing  
ISO/IEC 30122-3 : 2017 Information technology -- User interfaces -- Voice  
commands -- Part 3: Translation and localization

### **ISO/IEC JTC 1**

ISO/IEC 40500:2012 (W3C): Information technology -- W3C Web Content Accessibility  
Guidelines (WCAG) 2.0

### **ISO/IEC JTC 1/SC 28**

ISO/IEC 10779:2008 Information technology -- Office equipment  
accessibility guidelines for elderly persons and persons with disabilities

### **ISO/IEC JTC 1/SC 36 Information technology for learning, education and training**

ISO/IEC PDTR 23842-1 Information technology for learning, education, and training --  
Human factor guidelines for utilization of virtual reality content in LET domain -- Part 1:  
Considerations when using VR content

ISO/IEC PDTR 23842-2 Information technology for learning, education, and training --  
Human factor guidelines for utilization of virtual reality content in LET domain -- Part 2:  
Considerations when making VR content

### **CEN/CLC/JTC 12 - Design for All**

EN 17161:2019 Design for All - Accessibility following a Design for All approach in  
products, goods and services - Extending the range of users

### **CEN/CLC/ETSI/JWG Accessibility**

CEN/CLC/ETSI TR 101550:2014 (WI=JWEAC002): Documents relevant to EN 301 549  
"Accessibility requirements suitable for public procurement of ICT products and services in  
Europe" 2014-02-19

CEN/CLC/ETSI TR 101551:2014 (WI=JWEAC003): Guidelines on the use of accessibility award criteria suitable for public procurement of ICT products and services in Europe 2014-02-19

CEN/CLC/ETSI/TR 101 552:2014 (WI=JWEAC004): Guidance for the application of conformity assessment to accessibility requirements for public procurement of ICT products and services in Europe 2014-03-05

EN 301549:2015 (WI=JWEAC005): Accessibility requirements suitable for public procurement of ICT products and services in Europe

### **CEN/CLC/JTC 11 - Accessibility in the built environment**

prEN 17210 (WI=JT011001): Accessibility and usability of the built environment. Functional requirements

(WI=JT011002): Accessibility and usability of the built environment - Technical performance criteria and specifications