



Attachment 1: Exemplars of alignment between Standards and the SDGs

SDG 3 (Good Health & Well-being)

Healthcare and the Digital Hospitals Handbook (SA HB 163:2017)

Australia's universal healthcare system serves nearly 25 million and employs around 660,000 people. As with many nations around the world, the country's ageing population is not only having an impact on the delivery of services across metropolitan, regional and remote locations but also has the potential to impact the economy. To address these and other health and community service related challenges, Standards Australia is focusing on a range of Standards designed to support the delivery of safe, effective, quality health-care products, services and patient experiences. The ultimate aim is to contribute to better health outcomes for the Australian community.

Standards Australia's world's first Digital Hospitals Handbook (SA HB 163:2017), an initiative developed by a range of national experts, is promoting a broad set of principles and recommendations to inform the design and implementation of Digital Hospitals across Australia. The Handbook aims to support innovative ways of providing healthcare services in both new and refurbished hospitals, across all service settings, leading to greater connected healthcare and more positive outcomes now and into the future.

As healthcare budgets across Australia face continuing pressure, Australian Standards that support greater efficiency and effectiveness of service implementation can provide ongoing benefit to the Australian community, through promoting access to consistent and quality health and social care services.

SDG 6 (Clean water and sanitation) & SDG 12 (Responsible consumption and production)

Water Efficiency Labelling Scheme (WELS)

The World Economic Forum consistently ranks water among the top five risks that could impact the economy, and our quality of life, negatively. Standards Australia responded to this challenge by facilitating the Water Efficiency Labelling and Standards scheme (WELS). This scheme is designed to inform consumers about water use through the labelling of consumer products. Standards Australia has now successfully engaged with ISO and our international partners to facilitate the development of an International Standard based on WELS. The internationalisation of this scheme will not only have a direct benefit for the Australian export industry through harmonisation, but will have a real impact on the water demand and use by consumers within our international partner economies, particularly where domestic use of water poses ongoing risks to the environment.

SDG 9 (Industry, Innovation and Infrastructure)

(A) Cyclones: BD-099 – Wind Loading

AS 4055:2012 was developed by technical committee BD-099 Wind loads for housing, with the knowledge that it would be referenced in the Australian National Construction Code (NCC). The standard was developed with the objective of providing guidance to the building industry about the wind loading of products that are used in housing. It addresses climatic conditions that are unique to Australia, including cyclonic and non-cyclonic regions, as well as the influence of different topographical areas and proximity to bodies of water. AS 4055:2012 is critical as it provides direction for builders making decisions regarding building materials that can increase the resilience of housing in extreme weather conditions. It also provides guidance to the industry and the market as to the quality that should be expected in wind resistance products and their use. Wind loading is one example of a standard that has been critical in protecting the Australian public from potential building damage during extreme weather events throughout recent history, such as cyclone Yasi. Tropical cyclone Yasi

made landfall in northern Queensland in February of 2011. The powerful cyclone had extreme wind speeds and caused major destruction but did not directly result in any deaths. The damage to infrastructure in the area, although severe and the most costly throughout Australian history, was less than anticipated due to the implementation of post-1980s Australian Standards that specified the structure of housing in the cyclone-prone region. This is a story of Australian Standards working for the Australian community, ensuring competitiveness in the sector, while at the same time maintaining quality and promoting safety.

(B) Construction of buildings in bushfire prone areas: The Bushfire Standard

Bushfires are a fact of Australian life. Standards Australia is committed to the development and maintenance of Standards to support and enhance the safety of the community. For instance, AS 3959:2009 Construction of buildings in bushfire-prone areas, is maintained by committee FP-020 Construction in bushfire prone areas and is currently being updated. The standard is primarily focused on improving the resilience of buildings in order to protect both the building occupants and the building itself while a fire front passes. It specifies requirements for the construction of buildings in bushfire-prone areas in order to improve resistance to burning embers, radiant heat and flame contact. In 2009 a Royal Commission was held into the Victorian Black Saturday Bushfires which claimed the lives of 173 people and caused extensive damage at an estimated cost of \$4 billion. The Royal Commission published findings about the performance of buildings in response to extreme heat, strong winds and intense fire fronts. As a result of these findings and recommendations, three amendments were made to the Australian Bushfire Standard. AS 3959 is currently being revised through expert input from the fire and building authorities, comprehensive research, and public consultation with stakeholders across the sector. Handbook 330:2009 Living in bushfire-prone areas, has also been published to provide guidance on AS 3959 and inform the Australian public of suggested measures to reduce the potential damage to their homes by bushfires. As extreme weather events are a continuing concern for communities, as well as property developers and owners, Australian Standards are vital to ensuring that homes are built in accordance with building codes to increase their chance of survival when facing a natural disaster.

SDG 11: Make cities inclusive, safe, resilient and sustainable

Accessibility

Standards Australia Committee ME-064 *Access for people with disabilities* developed *AS/NZS 1428.4.1 Design for access and mobility*. This standard is referenced in the Building Code of Australia (BCA) and in Disability standards (Premises Standards). The BCA and the Premises Standards define where access to people with disability is required and reference a number of accessibility Standards to provide technical solutions for designers as a mean for compliance with Acceptable Construction Practice that are defined in the BCA itself. AS/NZS 1428.4.1 is critical as it provides a practical reference for designers and builders to design access for people with disabilities. It also gives building certifiers, designers and builders a technical tool to determine the means of compliance under the Premises Standards, enabling them to understand the technicalities of compliance and therefore ensuring that they won't be subject to successful complaints under the Disability Discriminatory Act (1992).

The Standard promotes inclusivity and safety for people with ambulant disability as well as vision and hearing impairment. It contains basic minimum technical details required to achieve the level of access for a deemed-to-satisfy solution under the BCA and is therefore an instrument of implementation of the legislation in this area. This Standard therefore represents a benchmark for accessible buildings and cities. This is an example of a standard at the intersection of human rights and infrastructure ensuring equal access and opportunity for people with disability in Australian cities, including public places, services and transportation.

SDG 17 (Partnerships for the Goals)

(A) Capacity building

Standards Australia provides capacity building and technical assistance to help developing and emerging countries increase involvement in regional and international standardisation activities. Structured technical assistance is key to improving developing countries' ability to meet international trade obligations and enhance access to global markets.

In response to the request from the Government of New Caledonia, Standards Australia (SA) has been working with New Caledonia on a building and construction standards harmonisation initiative. In collaboration with the Government of New Caledonia and AFNOR, the French National Standards Body, and with input from the industry, the project is assisting New Caledonia with economic integration in the Pacific region.

Working with SPRING (Standards, Productivity and Innovations Board, Singapore) and the Myanmar Department of Research and Innovation (DRI) National Standard and Quality Department, Standards Australia provided technical expertise at a joint workshop to strengthen Myanmar's ability to participate in national and international standards development activities and help address capability gaps.

As part of our approach to building regional capacity, Standards Australia is helping communities and fostering economic development by better understanding the role that cross border information flows play in facilitating global value chains in the digital economy to support innovation, productivity and competitiveness. Under the overarching APEC 2015 theme *Building inclusive Economies, Building a Better World*, the Australian Government and Standards Australia, together with representatives from government, regulators, national standards bodies, industry associations and SMEs convened a two day *APEC Harmonisation of Standards* workshop in Sydney. The workshop brought together 51 participants covering 15 APEC member economies, together with regional industry organisations and representative groups. It provided an opportunity for stakeholders to discuss findings from the *APEC Harmonisation for Standards and Data*, contribute to developing recommendations that support SMEs to be globally competitive in the digital age and resulted in the development of a new work plan.

In 2013, Standards Australia hosted an ASEAN Forum: AANZFTA Sub-Committee on Standards, Technical Regulations and Conformity Assessment Procedures. The forum highlighted the need to intensify joint efforts to strengthen awareness, information exchange and co-operation between ASEAN National Standards Bodies (NSBs) and the ISO, including through the development of industry sector standards road maps to identify the benefits of regional economic co-operation and the need for NSBs to continue mainstreaming standards development activities into national development agendas.

In 2011, to build leadership capabilities, regional development, as well as stronger linkages between Standards Australia and National Standards Bodies in developing countries, under the Australian Leadership Awards (ALA) Fellowship Program, Standards Australia hosted standards development colleagues from the National Standards Bodies of Botswana, Ghana, Namibia, Swaziland and Trinidad and Tobago.

(B) Systemic Issues – Multi-stakeholder partnerships

It is critical to the utility and market relevance of international standards to consider and incorporate the realities and priorities of developing country economies. Building strong partnerships with international colleagues and organisations, particularly in developing Indo-Pacific economies, is a key part of Standards Australia's approach to international stakeholder engagement. Bilateral and regional discussions are an essential part of our ISO, IEC and Pacific Area Standards Congress (PASC) engagement and help us align joint efforts to connect our Australian technical experts with their international colleagues.

The Indonesia-Australia Comprehensive Partnership Agreement (IA-CEPA) is a transformative partnership-in-action between Badan Standardisasi Nasional Indonesia (BSN) and Standards Australia that is supporting current negotiations and future implementation provisions to reduce Technical Barriers to Trade. A range of recommendations are being pursued as a result of the ground breaking *IA-CEPA Early Outcomes Initiative* that go towards enhancing market access and trade opportunities for Indonesian and Australian businesses, promote a greater awareness and understanding of the role that standards play in underpinning existing and future bilateral trade and investment flows. The initiative is also strengthening the relationship between BSN and SA to foster deeper standards and conformance assessment and collaboration and coordination.

In June 2016, in partnership with the Commonwealth Department of Industry, Innovation and Science, Standards Australia worked with key stakeholders from 15 APEC member economies to explore the *Role of Standards and Innovation for Driving APEC's Silver Economy*, or the opportunities that come from an ageing population, to release the *APEC Silver Economy Issues Paper*. This has led to the development of a recommendations report that was submitted to the *APEC Sub-Committee on Standards and Conformance*. As a result of this work, there has been endorsement by APEC to develop a standards and innovation roadmap. Australia will be leading this work.

What these case studies cumulatively highlight is the real role that Australian and International Standards can play in enabling the realisation of the SDGs. In some respects, they point to the role that Australian expertise, channeled through the Standards Australia Committee process, can play in facilitating solutions to global problems. For this reason, we suggest that a commitment, on the part of the Australian Government, to a systematic mapping of SDGs and areas of standardisation, can play an instrumental role in strengthening the evidence base. This would provide baseline information for aid-for-trade partners and government agencies and

enable the identification of tangible solutions to problems or challenges locally, nationally, regionally and internationally.