# Accessibility Related Standards for consideration in ICT Procurement

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## Summary

| **Standard** | **Date released** | **Jurisdiction** | **Scope** |
| --- | --- | --- | --- |
| [Web Content Accessibility Guidelines](https://www.w3.org/WAI/standards-guidelines/wcag/) (WCAG) | 2008 – WCAG 2.02018 - WCAG 2.12022 – WCAG 2.2 (TBC) | International standard | Web content |
| [Authoring Tool Accessibility Guidelines](https://www.w3.org/WAI/standards-guidelines/atag/) (ATAG) | 2015 (ATAG 2.0) | International standard | Web content creation |
| [AS EN 301 549:2020](https://store.standards.org.au/product?designationId=AS+EN+301+549%3a2020) Accessibility requirements for ICT products and services | 2020Update expected in 2023 after WCAG 2.2 released | Australian Standard (adopted from EU standard) | Web, software, documents, hardware |
| [ISO/IEC 30071-1:2019](https://www.iso.org/standard/70913.html)Information technology – Development of user interface accessibility; Part 1: Code of practice for creating accessible ICT products and services | 2019Expected to be adopted in Australia as AS ISO/IEC 30071-1 in later 2022 | ISO standard | Application of accessibility standards |

## Web Content Accessibility Guidelines (WCAG)

### Overview

WCAG is the international standard for web accessibility and is applicable to design, development and written content. Much of its guidance can be extended beyond the web to software, documents and digital interfaces. The current release is WCAG 2.1 from June 2018; WCAG 2.2 which builds on WCAG 2.0 and WCAG 2.1 is expected in the second half of 2022.

WCAG 2.1 comprises

* 4 principles: perceivable, operable, understandable, and robust
* 13 guidelines in WCAG 2.1
* 78 testable success criteria in WCAG 2.1 at three levels: A, AA, AAA

WCAG 2 is supported by:

* [Understanding WCAG](https://www.w3.org/WAI/WCAG21/Understanding/) – why each criteria is there
* [How to Meet WCAG 2 (Quick Reference)](http://www.w3.org/WAI/WCAG21/quickref/) – filterable list of WCAG criteria
* [Sufficient and Advisory Techniques](https://www.w3.org/WAI/WCAG21/Techniques/) – techniques to meet WCAG (not definitive)
* [Supplemental Guidance](https://www.w3.org/WAI/WCAG2/supplemental/)
	+ Cognitive Accessibility Guidance
	+ Low Vision Accessibility Guidance (late 2022)

### References:

* [WCAG 2 Overview](https://www.w3.org/WAI/standards-guidelines/wcag/) – links to the latest version and all the supporting documents
* [WCAG 2.1 map](https://intopia.digital/articles/intopia-launches-wcag-2-1-map/)

## Authoring Tool Accessibility Guidelines

### Overview

Whereas WCAG helps identify accessibility defects, ATAG helps avoid them in the first place.

ATAG Part A specifies what needs to be done to make authoring tools themselves accessible.

ATAG Part B outlines how authoring tools can support authors to produce accessible content by:

1. Ensuring that automatically specified content is accessible and that accessibility information is preserved when the content is saved.
2. Guiding publishers in presenting accessible content.
3. Supporting publishers in checking and repairing accessibility problems.
4. Making sure that features that support the production of accessible content are easy to access.

### References:

* [Authoring Tool Accessibility Guidelines (ATAG) Overview](https://www.w3.org/WAI/standards-guidelines/atag/)
	+ [ATAG at a Glance](https://www.w3.org/WAI/standards-guidelines/atag/glance/)
	+ [Authoring Tool Accessibility Guidelines 2.0 (ATAG)](https://www.w3.org/TR/ATAG20/) – the technical standard
* [Intopia Webinar: Introduction to ATAG (YouTube)](https://www.youtube.com/watch?v=I1T849ZFJ5g&list=PLwDZg2kBRS1y7LR2J4lyFVzUPZFJVBQiM&index=5) (July 2022)

## AS EN 301 549 Accessibility requirements for ICT products and services

### Overview

AS EN 301 549 – Accessibility Requirements for ICT Products and Services – is an Australian standard adopted directly from the European EN 301 549 by Standards Australia.

The standard has a list of ‘functional performance statements’ that explain the functionality needed to enable users with different disabilities to locate, identify and operate the functions in ICT. The user needs underlying the functional performance statements are the basis for the requirements in specific product criteria. The disabilities considered include

* vision, including colour perception
* hearing
* vocal capability
* manipulation, strength, and reach
* photosensitive triggered seizures
* limited cognition, language, or learning

Privacy is also mentioned to ensure the ICT maintains the privacy of users of these features at the same level as other users.

The testable criteria focus on the way that information can be presented, viewed, or interacted with start with. The criteria start with a set of generic requirements and then include specific testable criteria for:

* hardware and software
* technologies with two-way voice communication
* technologies that allow videos to be played
* websites
* documentation and non-web documents
* technologies that provide access to emergency services

Accessibility requirements for websites and web content leverage the Web Content Accessibility Guidelines, explicitly stating WCAG 2.1 Level AA (including Level A) as the benchmark for AS EN 301 459:2020. Where it’s appropriate, relevant WCAG criteria have been applied to other technologies, such as hardware, and software and documents. Additional criteria have also been specified for some categories such as hardware, e.g. kiosks, to meet the functionality required by different disabilities.

AS EN 301 549 is expected to be updated in 2023 following the expected release of WCAG 2.2 in December 2022.

### References:

* [AS EN 301 549:2020 - Accessibility requirements for ICT products and services](https://www.standards.org.au/standards-catalogue/sa-snz/other/it-040/as--en--301--549-colon-2020) (Standards Australia listing)
	+ [Purchase AS EN 301 549:2020 from Standards Australia](https://store.standards.org.au/product/as-en-301-549-2020) (~$14)
	+ [Download EN 301 549:2019 as PDF from ETSI](https://www.etsi.org/deliver/etsi_en/301500_301599/301549/03.01.01_60/en_301549v030101p.pdf) (free)
* [Australia adopts new standard in accessible procurement](https://intopia.digital/articles/australia-adopts-new-standard-in-accessible-procurement/) (Dec 2020)
* [Australia revises AS EN 301 549, proposes to increase accessibility standards](https://intopia.digital/articles/australia-revises-as-en-301-549-proposes-to-increase-accessibility-standards/) (July 2020)
* [EN 301 549: What it means for Australia](https://intopia.digital/articles/en-301-549-australia/) (July 2017)

## AS ISO/IEC 30071-1:2022

### Overview

ISO/IEC 30071-1:2019 has been published as a direct adoption Australian Standard by Standards Australia.

It is a process-oriented standard enabling organisations to embed accessibility considerations into their “business as usual” processes. It does this by combining guidance on implementing the accessibility of ICT systems (ICT accessibility) both at organizational and system development levels. The document gives guidelines for building and maintaining ICT systems (including products and services) that are accessible to diverse users (including users with disabilities and older people). From the abstract:

It gives requirements and recommendations for organizations:

1. ensuring accessibility is considered in their policies or strategy by creating an organizational ICT accessibility policy
2. embedding the consideration of accessibility decisions through the entire process of developing procuring, installing, operating and maintaining ICT systems, and documenting these choices
3. justifying decisions on accessibility
4. communicating the ICT system's accessibility decisions to its users at launch, through creating and publishing its accessibility statement.

### References:

* [AS ISO/IEC 30071.1:2022 preview (Standards Australia)](https://store.standards.org.au/reader/as-iso-iec-30071-1-2022?preview=1)
	+ Available from [Standards Australia store](https://store.standards.org.au/product/as-iso-iec-30071-1-2022) ($219)
* [ISO/IEC 30071-1:2019 – ISO catalogue](https://www.iso.org/standard/70913.html)
* [ISO/IEC 30071-1:2019 – limited extracts](https://www.iso.org/obp/ui/#iso:std:iso-iec:30071:-1:ed-1:v1:en)
* [ISO 30071-1 digital accessibility standard – all you need to know (video)](https://www.hassellinclusion.com/iso-30071-1/)