usability comparison of calendar date formats

table MMc9-*01 - interform Gregorian*

form	zeroes	example	clear	sortable	interchange-ready	usability	annotation
full	full	AD 2009 January 05 Monday	✓	✓	excellent	excellent	the use of an era designator is often optional,
long	full	2009 January 05 Monday	✓	✓	excellent	excellent	
medium	full	2009 Jan 05 Mon	✓	✓	excellent	excellent	
short	full	2009 Jan 05	✓	✓	excellent	excellent	
compressed	full	2009-01-05	✓	✓	excellent	excellent	an all-numeric date format that is also described in ISO 8601

interform positions data elements chronologically, for both logical organization and for enhanced scanning. as number elements are not packed together, doesn't need as much punctuation.

table MMc9-*02 - interform ICAS*

form	zeroes	example	clear	sortable	interchange-ready	usability	annotation
full	full	UCN 12009 N05 Yellow	✓	✓	excellent	excellent	what essential ICAS references are readily available to a user?
short	full	9N05 Yellow	✓	✓	excellent	excellent	
compressed		c9N05	✓	✓	excellent	excellent	be sure to reference an effective version of ICAS

although customary formats are often identified as US formats, many organizations in the US use interform and continental date formats. it is largely unknown why customary formats are used, how they were designed, or whether other formats were considered.

table MMc9-*03 - continental Gregorian*

form	zeroes	example	clear	sortable	interchange-ready	usability
full	full	Monday 05 January 2009 AD	✓	no	limited	limited
long	full	Monday 05 January 2009	✓	no	limited	limited
medium	full	Mon 05 Jan 2009	✓	no	limited	limited
short	full	05 Jan 2009	✓	no	limited	limited
compressed	partial	05-01-09	no	no	very limited	very limited

customary places the year data element in a 'footnote' rather than a 'chronological' position. scanning is challenged by disjointed positioning of data elements, Monday doesn't uniquely reference a date in January, and 05 doesn't uniquely reference a date in 2009. additional punctuation is needed when numbers are packed together.

table MMc9-*04 - customary Gregorian*

form	zeroes	example	clear	sortable	interchange-ready	usability
full	full	Monday, January 05, 2009 AD	✓	no	limited	limited
long	full	Monday, January 05, 2009	✓	no	limited	limited
medium	full	Mon, Jan 05, 2009	✓	no	limited	limited
short	full	Jan 05, 2009	✓	no	limited	limited
compressed	partial	01-05-09	no	no	very limited	very limited

table MMc9-*05- unclear*

form	zeroes	example	clear	sortable	interchange-ready	usability	annotation
too short	partial	01-05-09	no	no	very limited	very limited	not built for y2k, and on its own, little format cues
way too short	none	1-5-9	no	no	very limited	very limited	not built for y2k, and on its own, very little format cues

this comparison is limited to a consideration of the usability of date and time elements in particular formats (such as a date or time record on a web form or in a database record), and does not concern the expression of particular date and time elements that are used independent of a particular data format (such as informal conversation).

the comparison of formats involves a consideration of the usability of a format, reckoned on its own with little or no contextual cues. the comparison utilizes a number of AAT ICAS standards documents. some of the points of comparison also correspond to ISO 8601.

order—a classification of the chronological or customary arrangement of the individual data elements

form—a simple classification of long or short forms of a calendar date format

zeroes—a description of the representation of leading zeroes in a format

example—an illustration of the date in a designated format

clear—a representation of conformance with ICAS conformance level A. [ICAS 2062 conformance level A is an AAT ICAS interpretation of Web Content Accessibility Guidelines (WCAG) standards concerning the usability of date and time formats.]

sortable—a representation of whether the alphanumeric sort of format items is the same as the chronological sort (without additional datatable processing).

interchange-ready—a subjective assessment of how ready a format is for processing among a large number of different types of common data interchange.

usability—a subjective assessment of how well a particular format can accommodate an array of typical user needs.

Questions? be sure to read the AAT ICAS 2062, ISO 8601, and W3 WAI WCAG standards.

conclusion: a default data format is not necessarily a best choice for users. developers can add value by considering the usability of date and time formats. usability of date and time formats can encompass the selection of a quality format, in addition to support for sortability and other types of interchange.