

# AECMA Simplified English

AECMA SE is used in the aircraft industry. **Mike Unwalla** gives an overview of this documentation specification.

The European Association of Aerospace Industries (formerly AECMA, now ASD) has produced a specification for aircraft documentation. This specification is known as *AECMA Simplified English* (SE). It deals with the language and writing style of the documentation.

AECMA SE is used around the world for documentation that is written to the ATA 2200 (civil aircraft) specification and to the S1000D (military vehicles) specification. (Lewis Marshall explained S1000D in the autumn 2004 issue of *Communicator*. This defines the layout and format of technical documentation. AECMA SE is required as part of S1000D.)

AECMA SE provides a set of writing rules and a dictionary of words and their meanings. It has:

- A limited number of words
- A limited number of clearly defined meanings for each word
- A limited number of parts of speech for each word
- A set of rules for writing text.

## Limited number of words

In everyday English, different words may have a similar meaning. For example, consider the sentence *Locate the pin in the aperture*.

Some synonyms for the verb *locate* are *fit*, *mount*, *position*, *place*, *put*, *set* and *situate*.

Which one should a writer use? AECMA SE specifies that you should use the word *put* when you mean, 'to cause something to move or to be in a position'.

Similarly, you cannot use the word *deactivate*. Instead, you are recommended to use one of these: *stop*, *disconnect*, *isolate*.

The majority of the AECMA SE guide consists of a dictionary of keywords. The list of keywords contains both words that are approved (such as *put*) and words that are not approved (such as *deactivate*).

For each approved keyword, the dictionary specifies the part of speech for which it can be used. The meaning of the word is shown, along with an example of correct use. For each keyword that is not approved, the dictionary suggests alternative words, along with an example of correct use of the alternative. Approved keywords and examples are in capitals, as shown in Figure 1.

## One word, one meaning

In everyday English, a single word can have many different meanings. Usually,

we can understand the meaning from the context. For example, a noun may have more than one meaning:

- The drive is faulty (*drive* is some component of a machine).
- The drive is boring (*drive* refers to the act of travelling in a car).

One word might have different interpretations. For example, the sentence *Replace the filter* could mean either of the following:

- Put back the filter that you took out.
- Install a new filter.

For each word that you are allowed to use, AECMA SE specifies the meaning of that word. Generally, one word has just one meaning.

For product-specific terms, such as the name of a part, AECMA SE recommends that you build a dictionary of terminology (a glossary of terms). Use only the permitted terms in your writing.

## Parts of speech

In English, one word is often used in different ways. For example, the word *oil* can be used both as a noun and as a verb:

- The oil is contaminated.
- Oil the bearings liberally.

For each word, AECMA SE specifies how you can use the word. For example,

AECMA SIMPLIFIED ENGLISH			
Keyword (part of speech)	Assigned Meaning/ USE	APPROVED EXAMPLE	Not Acceptable
capable (adj)	CAN (v), APPROVED	THE POWER UNIT CAN SUPPLY 28 VDC. AN APPROVED PERSON MUST DO THE IMPORTANT CHECKS.	The power unit is capable of producing 28 VDC. Vital checks are to be carried out by a capable person.
CAPACITY (n)	The maximum quantity that something can hold or make	THE CAPACITY OF THE FIN FUEL TANK IS 564 LITERS.	

Figure 1. Part of a dictionary page from the AECMA SE guide

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you are allowed to use the word *oil* as a noun, but you are not allowed to use it as a verb.

### Rules for writing text

There are many ways of categorising information. AECMA SE uses:

- *Description*. This provides an explanation, some information, or a statement about something.
- *Procedure*. This tells someone how to perform a task.

AECMA SE has a set of rules that specify how to write text. However, it is not designed to teach people how to write English. It states that the user should have a good writing ability and it assumes that the writer is familiar with the basics of traditional English grammar.

Many of the rules are best-practice guidelines that most technical communicators should be following anyway. For example:

- Use short sentences. (The recommended maximum is 20 words in a procedural sentence and 25 words in a descriptive sentence.)
- Avoid the passive voice.
- Be as specific as possible.

On the other hand, there are some very specific rules:

- Use the conjunction *that* after subordinate clauses that use verbs such as *make sure* and *show*. For example, write *Make sure that the valve is open*. Do not write *Make sure the valve is open*.
- Introduce a list item with a dash (hyphen).

- Do not use clusters of more than three nouns. For example, instead of *Runway light connection resistance calibration* write *Calibration of the resistance on a runway light connection*.

AECMA SE generally does not deal with formatting issues such as the typeface or its size, the width of margins, and the format for cross-references.


### Discussion

For many years, I have been in favour of controlling the language that I use in my documentation. Working with the AECMA SE guide has strengthened that belief.

However, it is not a universal solution. There are some rules with which I disagree. For instance, AECMA SE states that the present perfect tense should not be used. As an example, the sentence *We have received reports that the engines are defective* would not be allowed. Rather, it could be phrased *We received reports that the engines are defective*. There is, however, a slight difference in meaning between the present perfect version and the simple past version of the sentences.

The English language can certainly be ambiguous. A sentence may follow all the rules of grammar and all the rules of AECMA SE, and still it could be ambiguous. Following the rules blindly is not sufficient—writers must use their intelligence.

The AECMA SE guide has been available since 1986; the most recent version was published in January 2004. It costs £131 from InfoVision Systems Ltd, the official distributor in the UK ([www.infovision.co.uk](http://www.infovision.co.uk))

In April 2004 the AECMA organisation merged with other organisations to form ASD, the AeroSpace and Defence Industries Association of Europe ([www.asd-europe.org](http://www.asd-europe.org)). AECMA SE is being renamed *ASD Simplified Technical English Specification ASD-STE100*. For more information, visit: [www.simplifiedenglish-aecma.org/Simplified\\_English.htm](http://www.simplifiedenglish-aecma.org/Simplified_English.htm) 

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This article originally appeared in *Communicator*, Winter 2004

AECMA SE is now known as ASD Simplified Technical English, Specification ASD-STE100