ASD-STE100: Simplified Technical English, from Aerospace and Defense and beyond

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No more than 30 seconds about me!
Simplified Technical English Specification

ASD-STE100

International Specification for the preparation of technical documentation in a controlled language
1979

AEA asks AECMA to develop a simplified form of English for maintenance documentation.

1981-1986

SEWG is born. After analyzing maintenance docs, it sets a group of writing rules and a controlled dictionary. **1986 – First release of a SE Guide.**

1995

Issue 1, Sept 1995. The SEWG becomes the SEMG.

2005

AECMA becomes ASD. “Technical” added to the name of Spec. ASD-STE100

2013

Release of Issue 6

Jan. 2017

Release of Issue 7

AEA: Association of European Airlines

AECMA: European Association of Aerospace Industries (now ASD)

SEWG: Simplified English Working Group (now STEMG, Simplified Technical English Maintenance Group)
Purpose and objectives of STE

Complex technical instructions can be misunderstood and misunderstandings can lead to accidents.

**STE makes technical texts easy to understand by all readers** and can be regarded as an important and valuable resource for technical writing to simplify the correct understanding of procedures and operational texts, remove linguistic barriers, and reduce Human Factor risks.
Why a controlled language for aviation?

The increasing complexity of air vehicles
Why a controlled language for aviation?

The increasing complexity of documentation and data
Why a controlled language for aviation?

The increasing number of readers (users) who are non-native English speakers
What is ASD-STE100?

The ASD-STE100 Specification:

• Is a set of writing rules and a dictionary of controlled vocabulary
• Makes technical texts easy to understand especially for non-native speakers of English
• Has a controlled general vocabulary
• Has sufficient words to write all technical sentences
• Is adaptable and flexible
• Permits the use of company terminology
• Permits the use of common engineering and scientific terms
• Helps the translation of English texts into other languages.
Who uses ASD-STE100?

ASD-STE100 was developed for the aviation industry and it is a recommendation and a requirement of specifications used for writing technical publications (S1000D and ATA i2200)

2
2.1 General writing rules

Language

The project or the organization must specify the language in which the data modules are written. If that language is English, then it is recommended to use the writing rules and vocabulary in ASD Simplified Technical English, ASD-STE100® (formerly known as AECMA Simplified English, AECMA Document No. PSC-85-16598).

Business rule decision point BRDP-S1-00020 - Specify the language:

- Decide which language to use for producing data modules.

Business rule decision point BRDP-S1-00021 - Use of ASD-STE100®:

- When producing data modules in English, decide whether to use ASD-STE100®.

A standard dictionary must also be designated by the project or the organization. If the maintenance data for the data modules is required in the English language, it is recommended that the Merriam-Webster's Dictionary be used as the standard.

Applicable to: All

S1000D-A-03-09-0100-00A-040A-A

Chap 3.9.1
Who uses ASD-STE100?

However, 58% of the ASD-STE100 users are now outside aerospace and defense.

Copies of the specification have been requested by:

- 105 different countries worldwide (63% outside Europe)
- More than 250 universities worldwide
- Important companies in various sectors of industries

![Companies using ASD-STE100](image)
### Who uses ASD-STE100?

**USERS**

(Data from the STEMG distribution log, Issue 7, January 2017, updated August 11, 2018)

<table>
<thead>
<tr>
<th>USER SCENARIO</th>
<th>COPIES</th>
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<tbody>
<tr>
<td>English-speaking countries</td>
<td>1321</td>
<td>42%</td>
</tr>
<tr>
<td>Non-English speaking countries</td>
<td>1846</td>
<td>58%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3167</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>USER SCENARIO</th>
<th>COPIES</th>
<th>%</th>
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<tbody>
<tr>
<td>New Users</td>
<td>2244</td>
<td>71%</td>
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<tr>
<td>Existing Users</td>
<td>923</td>
<td>29%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3167</td>
<td>100%</td>
</tr>
</tbody>
</table>
### Who uses ASD-STE100?

**USERS**

(Data from the STEMG distribution log, Issue 7, January 2017, updated August 11, 2018)

<table>
<thead>
<tr>
<th>USER SCENARIO - Fields of activity</th>
<th>COPIES</th>
<th>% ISSUE 7</th>
</tr>
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<tbody>
<tr>
<td>Aerospace and Defense (inc. Government Agencies)</td>
<td>1137</td>
<td>36%</td>
</tr>
<tr>
<td>Language Services, Translations, Technical Documentation</td>
<td>435</td>
<td>14%</td>
</tr>
<tr>
<td>Information Technology, Hi-Tech, Software, Telecommunications</td>
<td>414</td>
<td>13%</td>
</tr>
<tr>
<td>Airlines and Air Forces</td>
<td>205</td>
<td>6%</td>
</tr>
<tr>
<td>Academics, Education and Research</td>
<td>188</td>
<td>6%</td>
</tr>
<tr>
<td>Automotive, Railways and Transportation (general including Sea)</td>
<td>179</td>
<td>6%</td>
</tr>
<tr>
<td>Mechanical Engineering, manufacturing, and processes</td>
<td>168</td>
<td>5%</td>
</tr>
<tr>
<td>Others (different branches of industry)</td>
<td>171</td>
<td>5%</td>
</tr>
<tr>
<td>Energy (Oil, gas, electricity, nuclear, etc.)</td>
<td>111</td>
<td>4%</td>
</tr>
<tr>
<td>Medical and Healthcare</td>
<td>102</td>
<td>3%</td>
</tr>
<tr>
<td>Private (personal use)</td>
<td>57</td>
<td>2%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>3167</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Advantages of STE

- It minimizes language problems for non-native English speakers.
- It reduces risks of human error in maintenance work.
- It can be adapted to many different domains.
- It makes the translatability of English text easier.
The STEMG (STE Maintenance Group)
Maintenance of the Specification

The **STEMG** maintains the ASD-STE100 specification.

The STEMG meets twice a year to maintain, update and continue developing the ASD-STE100 spec.

Users send **Change Forms** that are analyzed by the STEMG during the meetings. Usually, every 3 years a new issue is released.
In the words of an end user

“As an end user (I was a helicopter avionics technician in the armed forces for 6 years), using it is a delight.

'Replace' does not mean the same as 'fit new'. 'Inspect' and 'examine' are not the same and it is so much easier when you know exactly what the instructions are telling you to do and - believe me - when you are balanced at the top of a ladder at the far end of an airfield in pouring rain at 2 am in the morning struggling to fit a replacement component on the tail of a helicopter, you appreciate clear instructions.”

Simon North, Technical Writer
In the words of a great American novelist

“Easy reading is damn hard writing.”

[Image of Nathaniel Hawthorne]
PART 1 – WRITING RULES

There are 53 writing rules in STE included in nine sections:

Section 1  Words
Section 2  Noun clusters
Section 3  Verbs
Section 4  Sentences
Section 5  Procedural writing
Section 6  Descriptive writing
Section 7  Safety instructions
Section 8  Punctuation and word count
Section 9  Writing practices

- **Issue 7** of ASD-STE100 is the result of four years of extensive work (2013-2017), six STEMG meetings, and passionate discussions.

- The specification incorporates all the feedback received from users through Change Forms.

- New graphic layout and introduction of colors to support clarity.

• Part of the sub-title of the cover page has been changed from "maintenance documentation" to "technical documentation".

• The new Section 7, in which "Warnings, Cautions, and Notes" now reads "Safety Instructions", is also intended for those who write outside the aeronautical field and uses the ANSI and ISO safety standards with other terms such as "danger", "attention", etc.

• Focus on simplifying and explaining the Writing Rules. The writing rules have been **reduced** from 65 to **53** (some rules have been merged and other redundant ones have been removed). We gave each rule a clear exposition of explanatory texts and added greatly improved examples.

• **Dictionary**: addition of new words and deletion of others. Review of numerous examples that were outdated and no longer in line with technological changes.
The next STEMG meeting will be hosted by GIFAS in Paris next October, and we are already working towards Issue 8, based on the Change Forms we have been receiving from users.

While for Issue 7 the main focus was to simplify the Writing Rules, for Issue 8 the main goal of the STEMG is to work on the dictionary examples, in order to make them more universal without however restricting the legacy of the aviation, aerospace and defense examples that have been the core and the essence of Simplified Technical English for nearly 40 years.

The estimated release date for Issue 8 is January 2020.
Interested in learning more about STE?

ASD STEMG official website http://www.asd-ste100.org
ASD STEMG Facebook Page https://www.facebook.com/asdstemg

In-person ASD certified training by STEMG members
http://www.asd-ste100.org/membership.html

Online ASD certified training at UniNettuno
https://www.uninettunouniversity.net

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Thank you for your attention!

Questions?