Creating \TeX\Live VPAT\textsuperscript{®} statement

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What is VPAT® and why do we need it?

European and US laws require accessibility features in hardware and software. Government agencies & contractors need a formal statement about conformance. Otherwise they may not be able to use a system, including \texttt{TEX}. [Yes, we know that many people with disabilities use \texttt{TEX}, and we are proud of it. No, it is not enough for the governments.]

The Information Technology Industry Council (ITI) developed Voluntary Product Accessibility Template (VPAT®) for this statement.

\texttt{TEX} itself: a huge ecosystem with hundreds of programs. We can not offer an accessibility statement for everything. Solution: offer separate statements for \texttt{TEX} distributions.

\textit{Currently this means \texttt{TEXLive}.}
Standards and sources

**WCAG:** Web Content Accessibility Guidelines 2.0 and Web Content Accessibility Guidelines 2.1. Developed for accessibility of Web pages. Used to access accessibility of electronic documentation *including software documentation.*

**Sec 508:** Revised Section 508 Standards. US Government standard. Incorporates WCAG.

**EN 301 549:** EN 301 549 Accessibility requirements suitable for public procurement of ICT products and services in Europe. European standard. Incorporates WCAG.

There are several versions of VPAT®. Since our distribution is international, we chose *international edition.*
What is our document is and is not

1. We do not state that the end product is accessible or even that one can create an accessible product with \TeX{} (but see later!)

2. We do state that \TeX{} itself is accessible: a person with certain disabilities can
   
   ▶ Learn how to use \TeX{}Live, and
   ▶ Efficiently use \TeX{}Live.
Initial idea (and why it was wrong)

Initial thought: Our tools are command line. Command line is accessible $\Rightarrow$ our tools are accessible. Case closed.

Problems (found when we started the effort):

1. Accessible products must have accessible documentation. Is our documentation accessible?
2. Accessible products must satisfy certain criteria. We must explicitly list them and state the conformance.
Accessible products must have accessible documentation. But current TeX Live has 36,769 documents. Are they all accessible? Can we verify this?


Results:

1. Mostly AA level compliance.
2. We need to provide alt text for all images—even if they are not used in text only regime!
3. Providing AAA level compliance is difficult, and not needed by government standards.
TEXLive & government standards

US Government and European Union Standards are different for different types of programs:

Web: For us it is Web documentations.

Electronic Docs: For us it is our documentation.

Software: Generic programs.

Closed systems: Systems that cannot be connected to accessibility systems (screen readers etc)

Authoring tools: Tools used to create documents.

We state compliance for Web and Non-web documentation, and software with one exception: Usage with limited cognition, language or learning.
Results and next steps

The result: https://github.com/TeXUsersGroup/TeX-VPAT.

Next steps (from easy to difficult):

1. We need to make \TeX\ Live documentation fully compliant ⇒ add alt text to images.
2. We need to make VPAT statement itself fully accessible.
3. We may want to add statements for other distributions: Mac\TeX, Mik\TeX, pro\TeX\t...
4. We need to add certification of \TeX\ as authoring tool. This means tagging PDF.
5. We might start making package documentation accessible.