Creating T$_E$XLive VPAT® 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 TEX. [Yes, we know that many people with disabilities use 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.

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

Currently this means 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 TEXLive, and
   - Efficiently use TEXLive.

Initial idea (and why it was wrong)

Initial thought: Our tools are command line. Command line is accessible ⇒ 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.

TEXLive documentation and WCAG standards

Accessible products must have accessible documentation. But current TEX Live has 36 769 documents. Are they all accessible? Can we verify this?

The current decision: certify only the main document, *The TeX Live Guide—2021*.

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.

T_EXLive & 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 TEXLive documentation fully compliant $\Rightarrow$ 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: MacTEX, MikTEX, proTEXt. . .
4. We need to add certification of TEX as authoring tool. This means tagging PDF.
5. We might start making package documentation accessible.