Outline

- **Introduction to TEITAC**
  - rationale
  - members
- **Results**
- **Implementation**

Introduction

- # §508 of the Rehabilitation Act
  - – applies to federal agencies: all electronic and information technology (E&IT)
  - – employees and members of the public

- # §255 of the 1996 Communications Act
  - – applies to entire telecom market: equipment manufacturers and service providers in telecom and interconnected VoIP
  - – TEITAC did not address service provider issues

Why Update?

- # Frequent requests for clarification and technical assistance on 508
  - what products are covered?
  - just <u>procurement</u>, or <u>use</u> also?
- # Global market = international harmonization; many other standards activities underway
- # Technology convergence
  - products migrating across the 6 categories used in Section 508
  - widespread adoption of wireless and VoIP

TEITAC Membership

- Federal agencies
- ICT and AT industries and their trade associations
- Standards organizations
- Consumer advocates
- Researchers and developers
- National and international (EU, Japan, Canada, Australia) policy experts and consultants
- Broad public participation
- 8 Subcommittees
  - General Interface, Web/Software, Telecommunications, Audio-Video, Self-Contained, Hardware, Subpart A, Documentation

41 TEITAC Members

- Adobe Systems, Inc.
- American Association of People with Disabilities
- American Council of the Blind
- American Foundation for the Blind
- AOL LLC
- Apple, Inc.
- Association of Assistive Technology Act Programs
- Assistive Technology Industry Association
- AT&T
- Avaya, Inc.
- Canon USA, Inc.
- Communication Service for the Deaf
- CTIA - The Wireless Association
- Dell, Inc.
- Easter Seals
- European Commission
- Hearing Loss Association of America
- Human Rights and Equal Opportunity Commission (Australia)
- IBM
- Inclusive Technologies
- Industry Canada
- Information Technology Association of America
- Information Technology Industry Council
- Japanese Standards Association
- Microsoft Corporation
- National Association of State Chief Information Officers
- National Center on Disability and Access to Education
- National Federation of the Blind
- National Network of Disability and Business Technical Assistance Centers
- Panasonic Corporation of North America
- Paralyzed Veterans of America
- SRA International, Inc.
- Sun Microsystems, Inc.
- Telecommunications Industry Association
- The Paciello Group (TPG), LLC
- Trace Research and Development Center
- Usability Professionals' Association
- U.S. Department of Homeland Security
- U.S. Social Security Administration
- WGBH National Center for Accessible Media
- World Wide Web Consortium – Web Accessibility Initiative

- More provisions, but more testable and largely harmonized with other standards
- Technical Provisions and Functional Performance Criteria (FPCs)
- Structure and strength of recommendation
  - recommended provisions
  - provisions without consensus
  - "best practices"
  - notes, for Access Board or implementers
- Includes cognitive disabilities

- "Product characteristics" rather than "product categories"
  - "Real-time Voice Conversation Functionality", not "Telephone systems"

- Beyond procurement: specific implementation and use provisions
  - agencies must provide access to relay services, including video
  - agencies must configure accessibility features
  - agency-created content ("official agency communications") is covered

TEITAC Results (3 of 4)

- ## Specific to 255/Telecom
  - access to relay services
  - software in telecom products
  - volume control & amplification
  - real-time text
  - interactive voice response (IVR) provisions

- Software, Web, other content, and interface behavior now largely converged into "User Interface and Electronic Content"

- Web is now an application platform
  - actual user requirements virtually the same as desktop software

- Content
  - current standard only addresses Web content
  - everyone creates content

What Now?

- Access Board will take Report and develop a proposed rule, NPRM
  - economic impact
- Comment period
- Final Rule
- Federal Acquisition Regulations (FAR)
  - balance accessibility with other drivers
- FCC action?
- Timeframe?

Implementation

- # Information tools and "Communities of Practice"
  - "provision inflation" and complexity
  - consistent procurement practices
  - testing results (or at least protocols, metrics)
  - workarounds and user interface settings
  - VPAT, BuyAccessible, Trace Filter

- # Research & development
  - better metrics and tests for hearing and vision
  - emerging technologies
  - cognitive disabilities
  - assistance with AT-ICT interoperability

Other Jurisdictions

- # EU: Mandate 376
  - – accessibility standards inventory (includes Section 508)
  - – development of European Standards (harmonization)
  - – conformity assessment models and protocols

- # States
  - – many require accessibility, based on some or all of 508
  - – some cover education, local government, state funding recipients
  - – States lack GSA-type TA, 508 coordinators
  - – complexity is burdensome, results in narrowing the scope or relaxing the provision

Conclusions

- ## TEITAC Report addresses (but does not resolve) all of the issues
  - – unresolved: AT-ICT interoperability, when to apply FPCs
- ## Rulemaking will be ... lively
  - – minority reports
- ## Implementation issues involve many federal, state, international actors

New Recommendations for Section 508

Telecommunications and Electronic and Information Technology Advisory Committee

TEITAC

Who: The Telecommunications and Electronic and Information Technology Advisory Committee (TEITAC): 41 members from industry, government, international, and disabilities advocacy groups

What: Recommendations for how the U.S. Access Board should update Section 508 and Section 255 regulations.

Why: To make ICT products accessible to as wide a range of people with disabilities as possible.

When: July 2006 – April 2008

What's New?

Requirements based on product characteristics rather than product types. How do we classify products that have so many features?

Section 508 v1: Hardware…Telecom…Software/OS…Web… Video / Multi-media…Self-contained, closed product…Portable Computer?

Proposed Performance Criteria
- Without Vision
- With Limited Vision
- With Color Vision Deficits
- Without Hearing
- With Limited Hearing
- Without Speech
- With Limited Reach, Manipulation
- Without Physical Contact
- With Cognitive, Language, or Learning Limitations

Proposed Requirements
- Hardware with touch, speech output / throughput
- Electronic content
- Audio-video content, player, display
- Closed functionality
- Real-time voice
- Color
- Text size

Themes

Harmonization –   Can we create standards that are harmonized with international & industry standards?

Testability – Can we create standards that are precise and unambiguous enough to easily determine if products meet the requirements, but open enough so that the provisions do not stifle innovation?

Interoperability – Can we promote interoperability between AT & IT?

Cognitive Disabilities – How do we meet their needs?

Usability of the Standard and Guidelines – How can we make technical requirements clear?

The Recommendations

Subpart B: Functional Performance Criteria

Functional Performance Criteria (FPC) refer to different disability categories and the necessity of providing access to the functionality of products. The FPC have been modified from the previous version to include a note on the role of assistive technology in meeting the FPC.

Products must provide at least one mode that allows access to all functionality of the product:

A – Without Vision
B – With Limited Vision
C – With Color Vision Deficits
D – Without Hearing
E – With Limited Hearing

G – Without Speech
H – With Limited Reach, Strength or Manipulation
I – Without Physical Contact
J – With Cognitive, Language, or Learning Limitations

Subpart C: Technical Provisions

1. General Technical Requirements

2. Requirements for Hardware Aspects of Products

7. Additional Requirements for Authoring Tools

6. Additional Requirements for Real-Time Voice Conversation Functionality

3. Requirements for User Interface and Electronic Content

4. Additional Requirements for Audio-Visual Players or Displays

5. Requirements for Audio and/or Video Content

TEITAC Recommendations		Section 508 Source
Subpart C		
1-A	Closed Functionality	1194.25(a)
1-B	Biometric ID	1194.25(d), 1194.26(c)
1-C	Pass Through	1194.23(j)
1-D	Audio information	
1-E	Visual Information	
1-F	Color	1194.21(i), 194.25(g)
1-G	Text size	
1-H	Speech Operation	1194.23(e)
2.1.A	Reflectance Contrast for Legends and Passive Displays	1194.21(j), 1194,25(h)
2.1.B	Flashing	1194.21(i), 1194.25(j), 1194.25(k)
2.1.C	Mechanical Controls	1194.23(k), 1194.26(a)
2.1.D	Touch Operated	1194.25(c), 1194.26(b)
2.1.E	Standard Connection	1194.26(d)
2.1.F	Installed or Free-Standing Products	1194.25(j)
2.2.A	Magnetic Coupling	1194.23(h)
2.2.B	Interference with Hearing Device	1194.23(i)
2.2.C	Audio Connection	1194.25(e)
2.2.D	Volume	1194.25(f)
2.2.E	Volume (Gain)	1194.23(f)
2.2.F	Volume Reset	1194.23(g)

3.A	Color	1194.21(i), 1194.22(c), 1194.25(h)
3.B	Contrast	1194.21(j)
3.C	Size, shape, location	
3.D	User Preferences	1194.21(g)
3.E	Color Adjustment	1194.21(j)
3.F	Non-text Objects	1194.22(a)
3.G	Human Language	
3.H	Language of Parts	
3.I	Pausing	1194.21(h)
3.J	Flashing (Content and User Interfaces)	1194.21(k), 1194.22(j), 1194.25(i)
3.K	Consistent Identification	1194.21(e)
3.L	Audio Turnoff	1194.25(e)
3.M	Reading Sequence	1194.22(d)
3.N	Link Purpose	
3.O	Information and Relationships	1194.22(g), (h), (i), & (n), & (o), 1194.21(l)
3.P	User Interface Components	1194.21(l), 1194.22(l), 1194.22(n)
3.Q	Disruption of Access Features	1194.21(b)
3.R	Timing	1194.22(p), 1194.23(d), 1194.25(b)
3.S	Keyboard Operation	1194.21(a), (e), (f), (k), (l) & (m)
3.SS	Visual Indication of Keyboard Shortcuts	
3.T	Focus Indicator	1194.21(c)
3.U	AT Interoperability	1194.21(d), (c), (f) & (m)
3.V	Accessibility Services	
3.VV	Assistive Technology	
3.W	Multiple Ways	
3.X	Labels or Instructions	
3.Y	On Focus	
3.Z	On Input	
3.AA	Error Identification	
3.BB	Headings and Labels	
4.A	Caption Process	1194.24(a)
4.B	Supplemental Audio Playback (Process?)	1194.24(b)
4.C	Access to Caption and Video Controls	
5.A	Captions and Transcripts	1194.24(c)
5.B	Video Description	1194.24(d)
5.C	Interactive Elements	1194.24(d), 1194..22(b)
6.A	Real-Time Text Reliability & Interoperability	1194.23(b)
6.B	Voice Terminal Hardware & Software	1194.23(a)
6.C	IVR, Auto-Attendant and Messaging	1194.23(c)
6.D	Caller and Status Information	
6.E	Video Support	
6.F	Audio clarity for VoIP	
6.G	External Alerting Devices	
7	Authoring Tools	
7.A	Accessible Output	
7.B	Preserve Accessibility Information	
7.C	Prompts	
7.D	Accessible Templates	
Subpart D		
1	Information, Documentation & Support	
1.1	Product Documentation and Help	
1.1-A	Accessible Documentation and Features	194.41(a), 194.41(b)
1.1-B	Keyboard Shortcuts	
1.2	Support and E&IT related services	
1.2-A	Support Services	1194.41(c)
1.2-B	Manufacturer Contact	
1.2-C	Training	
2.A	Relay Services Accessibility	
2.B	Video Support	
2.C	Accessibility Configuration	
2.D	Accessible Content	

upa Usability in Civic Life

TEITAC United States Access Board

USAbility & Accessibility CENTER

tpg the paciello group