

March 31, 2008

Mr. Timothy Creagan  
Office of Technical and Information Services  
Architectural and Transportation Barriers Compliance Board  
1331 F Street, NW  
Suite 1000, Washington  
DC 20004-1111

Dear Mr. Creagan:

Panasonic Corporation of North America ("Panasonic") respectfully submits our minority report on the recommendations of the Access Board's Telecommunications and Electronics and Information Technology Advisory Committee ("TEITAC") to update regulations that implement Section 508 of the Rehabilitation Act and Section 255 of the Communications Act of 1996. Panasonic is the principal North American subsidiary of Matsushita Electric Industrial Co., Ltd., a world leader in electronics and telecommunications technology and products. Panasonic and its subsidiary and affiliated companies manufacture and market a wide range of consumer electronics, information technology, telecommunications products and thus have significant interest in outcome of the TEITAC process.

Paramount in Panasonic's corporate philosophy is the understanding that the Customer comes first, and that a company is indebted to society for its existence. Based on these principles, we strive to contribute to the community and to continue to develop products and services that meet the needs of all customers, including those with disabilities. Panasonic takes its corporate responsibility to comply with FCC 255 very seriously and has taken steps to ensure that our telecommunications products are designed, developed, and fabricated to be accessible to and usable by people with disabilities. These steps include employing Universal Design Principles and including people with disabilities in product tests. We are also seriously committed to helping our government customers comply with their Section 508 requirements.

Since the time the Access Board established the TEITAC in July 2006 the Committee and its members have worked through many difficult issues and found consensus in most of the recommendations being presented to the Access Board on April 3. Panasonic congratulates the members of the TEITAC on this achievement and is proud to have been a part of such an august body of experts. Despite the many hours of discussion and thousands of emails exchanged to complete this project, however, there were some areas where the TEITAC was not able to achieve consensus. Panasonic would like to take the opportunity to make these final additional comments to the Access Board to inform them of our views on these issues.

**Convergence and Accessibility:**

The TEITAC report recommendations apply to telecommunications, information technology and consumer electronics products. Although these technologies may use similar digital microprocessors and appear to be converging into similar uses, products from these industry sectors are quite different in function and often operate under different regulatory regimes. Accessibility requirements may be similar but the way these requirements are met

may be vastly different, depending on the technical capabilities of the product, the structure of the market and the nature of consumer demand.

For example, the way personal computers make their content available to low vision individuals is often via assistive technology (“AT”), such as screen reader software. For IT products that are operated by software operating on a personal computer, compatibility with AT is very important. On the other hand, telecom products such as a cordless phone are usually not capable or required to run AT software and must provide accessibility directly via text to speech capabilities built-in to the product by the manufacturer. Because the microprocessor in a cordless phone is much less powerful than the CPU of a personal computer, its capabilities are much more limited. In consumer electronics, products such as DVD players provide access to visual content by linking an audio file to the DVD menu element which is ‘played’ when selected.

These examples demonstrate that convergence to digital technologies enables a diversity of technological approaches to providing accessibility. Panasonic believes that many of the TEITAC provisions will enable such technical diversity to be employed by manufacturers and agencies, but we respectfully urge the Access Board to carefully implement the TEITAC recommendations in a manner that permits such a diversity of technological approaches and not take a “one-size-fits-all” approach to accessibility standards.

### **Testability**

Section 5.2 of the TEITAC report narrative provides a good discussion of the pros and cons of testability. We agree that the Access Board should not create any specific test methods for the provisions in the recommendations to allow for product innovation and flexibility. Each product is unique and product designers must have the flexibility to provide the best mix of product functionality and accessibility in order to meet the cost and performance requirements of a particular market. Panasonic supports the conclusion of this section that a mix of inspection, measure (formal test) and expert evaluation/review can be used to evaluate a product’s compliance with each of the applicable provisions.

### **Combining Section 508 and Section 255 provisions:**

Section 508 requires that when Federal agencies develop, procure, maintain, or use electronic and information technology (“E&IT”), Federal employees with disabilities have access to and use of information and data that is comparable to the access and use by Federal employees, who are not individuals with disabilities, unless an “undue burden” would be imposed on the agency. Section 255 requires telecommunications manufacturers to ensure that their products are accessible to and useable by persons with disabilities if “readily achievable”. Only in the case it is not “readily achievable” to provide direct accessibility is the manufacturer required to “ensure that the equipment or software is compatible with existing peripheral devices or specialized customer premises equipment commonly used by individuals with disabilities to achieve access, if readily achievable.” Under Section 255, the scope of this provision is limited by U.S. statute to only information that is needed for operation and use of the telecommunications functions of the product (e.g. web browsing and email are not covered).

The considerable differences between Section 508 and Section 255 include the responsible parties (agencies vs. manufacturers); weight of the obligation (“undue burden” vs. “readily achievable”) and covered products (E&IT encompasses telecommunications but also includes IT and CE product categories). Rather than address the obligations of Section 508 and

Section 255 separately, however, the TEITAC attempted to create, where possible, “a single harmonized set of consistent requirements that could be applied for both contexts.” The intent of the TEITAC in attempting to harmonize Section 508 and Section 255 provisions was understandable, but in reality may be impossible to attain with all technical provisions.

### **Assistive Technology and Section 255 and 508**

One area where Sections 255 and 508 differ significantly is in their requirements to support Assistive Technology (AT). This is simply because the two laws treat the role of AT differently. Section 255 requires accessibility in the mainstream telecommunications product, if “readily achievable”. If it is not “readily achievable”, then Section 255 requires compatibility with “existing peripheral devices or specialized CPE commonly used by individuals with disabilities”. This is generally not equivalent to the use of the term “assistive technology”, under Section 508, which applies to software tools used to provide accessibility (e.g. screen readers). In contrast, there is no preference for mainstream E&IT product accessibility in Section 508 where accessibility that is achieved through AT is perfectly acceptable.

### **Functional Performance Criteria**

Another area that demonstrates the difficulty with combining these two different regulatory requirements can be seen in the “functional performance criteria”, which was intended to provide requirements for accessibility for E&IT and telecommunications products where there are no specific technical provisions defined. These provisions require access to “all functionality”, which in many cases for Section 255 is too broad to be “readily achievable” and able to be carried out without much difficulty or expense. It would be more effective to require accessibility to functionality *necessary to operate* the product, and exclude functions like turning on electrical power, changing consumables (e.g. batteries, paper, etc.), initial configuration or configuration changes, set-up and maintenance. By setting the bar too high, the TEITAC may have created a goal that will be unreachable under the 255 standard, potentially forcing telecom manufacturers to abandon more reasonable accessibility strategies or to rely on peripheral devices.

For example, functional performance criteria (I) as drafted would require “at least one mode that allows access necessary to operate all functionality of the product without requiring any physical contact with the product beyond initial connection and setup of a special interface device.” This approach is perfectly acceptable under Section 508, which permits the use of AT to comply. But compliance under Section 255 would entail a level of advanced voice recognition capability that is currently not technically or economically feasible for consumer telecom products. A more reasonable approach for telecommunications products would be to allow a “press to operate voice control” feature that enables voice dialing with only a minimal physical contact, but does not require continuous ability to touch and operate controls on the product. Only where such a feature is not “readily achievable” should compatibility with an external special interface device be required.

### **TEITAC Process Concerns:**

One of the reasons for the lack of clarity and confusion created by attempting to combine Section 255 and Section 508 into a unified set of provisions was that the TEITAC discussion of these issues was initiated late and did not provide enough time for a robust discussion. A subcommittee was formed in November 2007 to make recommendations to the full Committee on this issue, to which Panasonic and many other members asked to participate, but were

subsequently requested to voluntarily step down in order to limit participation to 6-8 core members. These members developed a report titled “**Report from Task Force on 255/508 differences, with proposals for discussion**” that was distributed to the TEITAC via email on January 4, 2008, and presented to the TEITAC at the January 7 meeting.<sup>1</sup>

Panasonic was not able to attend this meeting because it was scheduled the same week as the 2008 International CES, a very important industry trade show held annually. Due to travel and other pressing business, we were unable to thoroughly review and comment on the Task Force report in advance of the January 7 meeting. We understand from others who participated in January meeting, that the 255/508 Task Force report was not discussed in much detail, but was accepted as the consensus of the TEITAC without subsequent discussion. We requested in advance to provide late comments, but were informed that if the committee reaches consensus it would be final, but if there was a provision that Panasonic would have otherwise disagreed; we would have the option of filing a minority report that would be included along with the final report to the Access Board.

The draft January 2008 TEITAC meeting minutes (circulated via email March 31, 2008) do not reflect that this report was discussed in detail, voted and approved with consensus. The assertion in the Section 2.7 of the narrative report notes, however, that the “Committee accepted the Task Force report, which determined that the recommendations generally apply to both Section 508 and Section 255, except in some specific provisions.” The charter of this task force was to “(a) Propose a model to the TEITAC for sorting technical provisions that do not apply to Section 255 or Section 508; and (b) Identify technical provisions that need to be modified strictly for Section 255” in order to “determine *whether* TEITAC can create the “one document, two sections” deliverable proposed.” Panasonic feels the recommendations in Section 2.7 cannot be documented as consensus by the meeting minutes or by the email record and thus should be discarded from the TEITAC report.

The only technical provisions that we feel should be applicable to telecommunications CPE under Section 255 are (1) Subpart B Functional Performance Requirements, (2) Subpart C, Section 2, Requirements for Hardware Aspects of Products; and (3) Subpart C, Section 6, Additional Requirements for Real-Time Voice Conversation Functionality. Please see additional comments in the Appendix to this Minority Report on Subpart B, Functional Performance Criteria, and Subpart C, Section 3, User Interface and Electronic Content. Information and documentation such as user guides or bills may be considered as part of a telecommunication service, but they are not applicable to telecom CPE which is the only focus of the Access Board’s guidelines.

Panasonic believes the TEITAC process was rushed (especially since the last January 7<sup>th</sup> face to face meeting), and did not provide enough time to permit the kind of robust debate that would have resulted in a more balanced and effective combination of Section 255 and Section 508 in the TEITAC recommendations. We hope that the Access Board will take into account these process concerns and our recommendations above in determining which provisions are appropriate to be applied to both Section 255 and Section 508, and which provisions should address these two different regulatory requirements in different ways.

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<sup>1</sup> See: <http://www.access-board.gov/sec508/refresh/teitac8th/tf-report.htm>

**Conclusion:**

Panasonic appreciates the hard work and dedication of the Access Board staff, TEITAC co-chairs, the Editorial Working Group (EWG), and all the members of TEITAC, who contributed so much time and effort towards these recommendations.

Respectfully submitted,

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Appendix

## **Appendix: Recommendations for Specific Provisions**

### **I. Comments on Subpart B: Functional Performance Criteria (FPC):**

Panasonic supports the goal of the functional performance criteria to provide access to E&IT and telecommunications products where there are no specific technical criteria defined. It is our view that access to “all functionality”, as all the FPC criteria are currently drafted, is too broad and too undefined to be useful or readily achievable. The functional criteria should only require accessibility necessary to operate the product, and should exclude functions like turning on electrical power, changing consumables, initial configuration or configuration changes, set-up and maintenance.

### **II. Comments on Subpart B: FPC, (I) Without Physical Contact**

FPC (I) as currently drafted would require compatibility with assistive technology for telecom products unless it provides advanced voice recognition capability that is not technically or economically feasible for most consumer products. For telecommunications products, a “press to operate voice control” feature that enables voice dialing with a minimal physical contact is a useful way of providing accessibility for many physically disabled individuals. A press to operate voice control feature allows telecommunication products to initiate or finish voice dialing via a minimal physical touch, but does not require continuous ability to touch and operate controls on the product. Only where such a feature is not readily achievable should compatibility with an external special interface device be required.

#### **Proposed revised version:**

##### **(I) Without Physical Contact**

**Section 508:** Products must provide at least one mode that allows access to all functionality necessary to operate of the product without requiring any physical contact with the product beyond initial connection and setup of a special interface device. This does not apply to turning on electrical power, changing consumables, initial configuration or configuration changes, set-up or maintenance.

**Section 255:** Telecommunications products must provide a mode that allows access to all functionality necessary to operate the telecommunications functions of the product with only minimal physical contact in order to initiate the call or change mode of operation to enable voice recognition. This does not apply to turning on electrical power, initial configuration or configuration changes, set-up or maintenance.

(See note on functional performance criteria and assistive technology.)

#### **Notes:**

1. While it is preferable that no contact at all be required, in some cases it may be required for the user to be assisted by a companion or bystander with these operations.
2. Assistive Technology examples:
  - The use of a standard network interface (e.g. USB, Ethernet, IEEE 1394, Wi-Fi, Bluetooth, etc.) that allows users to control the product using software via a wired or wireless network connection would meet this provision.
  - The use of the infra-red (“IR”) port used for remote controls in consumer electronics products would meet this provision.

3. Direct Access examples:

- Under Section 255, voice dialing or voice control would be an example of direct access. Access to voice dialing or voice control may require physical contact with the product to initiate the call or change mode of operation to enable voice recognition.

### **III. Comments on Subpart B: FPC, J - With Cognitive, Language or Learning Limitations**

Panasonic does not agree with FPC J - With Cognitive, Language or Learning Limitations. As worded this provision is too broad, not measurable and thus impossible to achieve. Subpart C provisions are more appropriate for such disabilities.

### **IV. Comments on Subpart C: Technical Requirements, 1-E - Visual Information**

Panasonic supports the goal of providing access to visual information necessary to operate E&IT and Telecommunications products. 1-E is in the technical provisions that applies to devices, but note 1 in the current draft is a requirement for content. E&IT cannot provide access to protected content that is encrypted or otherwise protected by digital rights management techniques. It would be technically difficult and legally impossible for manufacturers to violate U.S. law, which has severe penalties for circumvention, or to violate the terms of private licenses. The Federal agency or the developer/author of the content is the best party to assure accessibility. For example, the author of a DVD with visual menus can provide audio tags for each menu element that the DVD player simply 'plays' when selected.

For telecommunications products, Section 255 requires a product to be accessible to and useable by persons with disabilities unless readily achievable. Only in the case it is not readily achievable to provide direct accessibility is the manufacturer required to "ensure that the equipment or software is compatible with existing peripheral devices or specialized customer premises equipment commonly used by individuals with disabilities to achieve access, if readily achievable." Under Section 255, the scope of this provision is limited by U.S. statute to only information that is needed for operation and use the telecommunications functions of the product.

#### **Proposed revised version:**

##### **1-E - Visual Information**

All information that is needed for operation and use that is provided in visual form must also be available in at least one mode in audio form or in non-coded tactile form, either directly or via assistive technology.

Note 1: Braille is encouraged but cannot be the only non-visual way that information is presented.

Note 2: Section 255 and Section 508 treat AT solutions differently, so review section XX of this document before implementing a solution.

#### **DEFINITION**

##### **Non-coded tactile form**

Tactile form that does not require the memorization of any spatial or temporal tactile patterns.

Note 1: Simple vibration or switch up/down positions are examples of non-coded tactile forms

Note 2: Braille and vibration patterns are examples of coded tactile forms

## **V. Comments on Subpart C: Technical Requirements, Sec. 3. User Interface and Electronic Content**

It is not clear whether the User Interface and Electronic Content provisions are applicable to hardware user interfaces. While the statement below this heading in Subpart C states that these provisions apply to all "Electronic and Information Technology", the explanation of this section in the Narrative does not mention applicability to the huge category of products considered hardware. In addition, no mention of applicability to hardware is made in the rationale for the provisions or in the impact metadata.

Most of these provisions originated from Software and Operating System (Section 508 1194.21), Web-based Intranet and Internet Information and Application (Section 508 1194.22), or in the Web Content Accessibility Guidelines (WCAG) 2.0. These requirements were designed for web and software, not hardware displays and the TEITAC made little consideration of this large category of products as evidenced by the lack of guidance or specificity in reference to hardware user interfaces.

Therefore, it is recommended that 3. User Interface and Electronic Content not apply to hardware displays or to telecommunications CPE under Section 255.

## **VI. Comments on 4. Additional Requirements for Audio-Visual Players or Displays:**

We agree with 4-A-1, related to FCC 47 CFR 15.119 and 47 CFR 15.122, however, 4-A-2 is new and would be difficult to implement, especially on products with very small screen sizes, such as cell phones with mobile video reception. There is ongoing research to implement captions on such very small screen sizes, but the research is still inconclusive and there are no significant standards in this area, which continues to develop. We therefore recommend proceeding cautiously until such research and standards become available.