

**REPORT OF THE
SECRETARY OF HEALTH AND HUMAN RESOURCES
AND THE SECRETARY OF TECHNOLOGY**

**An Action Plan Prescribing Renewed
Partnerships among the Center
for Information Technology, the
Department of Information Technology
and the Disability Services Agencies**

**TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA**



HOUSE DOCUMENT NO. 15

**COMMONWEALTH OF VIRGINIA
RICHMOND
2003**



COMMONWEALTH of VIRGINIA

James A. Rothrock, M.S., L.P.C.
COMMISSIONER

Department Of Rehabilitative Services

8004 FRANKLIN FARMS DRIVE
POST OFFICE BOX K 300
RICHMOND, VIRGINIA 23288 - 0300

VOICE: (804) 662-7000
TTY: (804) 662-9040
VOICE - TOLL FREE: 800-552-5019
TTY - TOLL FREE: 800-464-9950
FAX: (804) 662-9532
EMAIL: drs@drs.state.va.us

December 12, 2002

Memorandum

To: The Honorable Mark R. Warner
Governor of Virginia

Members of the General Assembly

FROM: James A. Rothrock

A handwritten signature in black ink, appearing to read "James A. Rothrock", written over the printed name.

SUBJECT: House Joint Resolution 218

The 2002 General Assembly Session requested that the Secretaries of Technology and Health and Human Resources work with representatives of technology industries to develop an action plan prescribing renewed partnerships among the Center for Innovative Technology, the Department of Information Technology, and the rehabilitation agencies to strengthen cooperation in advancing research and new technologies to respond to the talents and needs of persons with disabilities. I am pleased to provide you with this report developed by an interagency workgroup to collaborate on this issue.

If you have any questions regarding this report, please feel free to contact me.

JAR/es

Attachment: *HJR 218 Study Report*

C: The Honorable Jane H. Woods
Secretary of Health and Human Resources

**AN ACTION PLAN PRESCRIBING RENEWED PARTNERSHIPS AMONG THE
CENTER FOR INNOVATIVE TECHNOLOGY, THE DEPARTMENT OF
INFORMATION TECHNOLOGY AND THE DISABILITY SERVICES
AGENCIES**

HOUSE JOINT RESOLUTION NO. 218

PREFACE

House Joint Resolution 218 from the 2002 General Assembly Session requested that the "Secretaries of Technology and Health and Human Resources work with representatives of technology industries to develop an action plan prescribing renewed partnerships among the Center for Innovative Technology (CIT), the Department of Information Technology (DIT) and rehabilitation agencies, including the Department of Rehabilitative Services, the Department for the Blind and Vision Impaired, the Department for the Deaf and Hard of Hearing and the Woodrow Wilson Rehabilitation Center, to strengthen cooperation in advancing research and new technologies to respond to the talents and needs of persons with disabilities." (Please see Appendix A for a copy of the resolution).

In response to the legislation, a workgroup was formed to collaborate on the issue. The workgroup consisted of:

Judy K. Ashley, Director, Woodrow Wilson Rehabilitation Center
Mary-Margaret Cash, Deputy Commissioner, Department of Rehabilitative Services
Jerry Coughter, Executive Director, Advisory Board for Virginia Biotechnology Initiative, Center for Innovative Technology
Paul H. Dodson, Director, VCO Acquisition Services Division, Virginia Department of Information Technology
Leslie Hutcheson Prince, Policy Analyst, Department for the Deaf and Hard of Hearing
Robert S. Burton, Deputy Commissioner for Services, Department for the Blind and Vision Impaired
Kenneth H. Knorr, Director, Virginia Assistive Technology System
Gerald E. Miller, Professor and Chairman of Biomedical Engineering, Virginia Commonwealth University
Art Phaup, Department of Information Technology
N. Jerry Simonoff, Director, Department of Technology Planning, Department of Information Technology

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	1
Statement of Major Issues	1
Recommendations	3
PRIOR ACCOMPLISHMENTS	3
CURRENT INITIATIVES	4, 5
FUTURE OPPORTUNITIES	5
APPENDICES	6
Appendix A House Joint Resolution Number 218	6, 7
Appendix B Proposed Inter-Governmental Agency Agreement	
Appendix C Recommended amendments to §2.2-3500 <i>et. seq.</i> of the Code of Virginia	
Appendix D 1994 Cooperative Agreement	
Appendix E COV ITRM Policy 92-1	

EXECUTIVE SUMMARY

The proposed response to the major issues addressed in this study and the proposed Inter-Governmental Agency Agreement (Appendix B) will increase awareness of the assistive and information technology needs of Virginians with disabilities, encourage researchers and product developers to consider people with disabilities as a potential market, and ensure that Virginians with disabilities have access to the same information as other citizens. Members of the study group believe that the issues can be resolved without a major investment of the Commonwealth's resources. In fact, through the successful collaboration of the partners, the Commonwealth will be uniquely positioned to pursue alternative funding. The proposed response will ensure compliance with federal standards for information technology access, and support implementation of "a customer-facing internet portal" as articulated in the Governor's Strategic Plan for Technology Plan.

Major Issues:

- Limited resources available to address the assistive and information technology needs of Virginians with disabilities.
- Lack of coordination and collaboration to address these needs.
- Researchers and product developers are not aware of the unique needs of persons with disabilities.
- Some manufacturers and researchers do not have access to users of assistive technology to field test devices and products.
- The number of assistive technology manufacturers in Virginia is limited.
- A standard for accessibility of information technology has not been adopted by the Commonwealth.
- A program for determining if state entities are providing accessible information does not exist.
- Although legislation exists that recognizes nonvisual access to information technology, it does not include all people with disabilities.
- State entities are not aware of their obligations to provide accessible information technology.
- Information technology acquisitions of telecommunications and information technology goods and services do not include terms and conditions related to accessibility for people with disabilities, except for nonvisual access.

Recommendations from the study include:

1. The partnerships established through the Inter-Governmental Agency Agreement will pursue joint ventures through collaborative grant proposals, potential research endeavors and public awareness initiatives.
2. The Secretaries of Technology and Health and Human Services will provide oversight to the Inter-Governmental Agency Agreement to ensure that objectives are met.
3. The Disability Services Agencies will provide technical assistance and training to researchers and product developers to better understand the needs of Virginians with disabilities.
4. The Disability Services Agencies will identify and provide a pool of users of assistive technology to field test devices and products for the researchers and Virginia manufacturers.
5. Virginia's Center for Innovative Technology will continue to advance the Commonwealth's position as a world technology and Internet leader and assist in creating, retaining and attracting technology-based jobs, businesses, and manufacturers of assistive technology to the Commonwealth.
6. The Secretary of Technology will invoke his authority under §2.2-226 (B)(3) of the Code of Virginia, as Chief Information Officer (CIO) to promulgate policies, standards, specifications and guidelines consistent with Section 508 of the Rehabilitation Act of 1973, as amended, as the standard for accessibility of information technology in the Commonwealth.
7. The Department of Technology Planning will develop a program for determining whether state agencies, institutions or political subdivisions of the Commonwealth are compliant with these policies, standards, specifications and guidelines. It is recommended that for those entities who are out of compliance, that the CIO further invoke his authority under §2.2-226 (B) (2) of the Code of Virginia, and require that they submit a plan and schedule for compliance.
8. The Terms and Conditions as specified in the *Agency Procurement and Surplus Property Manual (APSPM)*, will be modified to include a requirement that all acquisitions of telecommunications and information technology goods and services meet all statutory requirements and technology standards adopted by the Commonwealth.
9. Consideration should be given to expanding upon the Information Technology Access Act by amending §2.2-3504 of the Code of Virginia to ensure accessibility of information technology for all Virginians with disabilities. (Appendix C - recommended amendments)
10. The Disability Service Agencies and the Department of Technology Planning will work with VIPNet to implement a customer-facing Internet portal by creating common web site design templates for state agencies that comply with and exceed all accessibility and usability standards and a common look, feel, and navigation for all agency Web sites.

11. In collaboration with the Department of Technology Planning, the Disability Services Agencies will provide training and technical assistance and disseminate information on the obligations of these state entities to provide accessible information technology.
12. The Disability Services Agencies will establish assessment procedures for compliance of information technology access, and provide technical assistance to state entities.
13. The Acquisition Services Division of the Department of Technology Planning will ensure that all acquisitions of telecommunications and information technology goods and services meet all statutory requirements and technology standards adopted by the Commonwealth.

PRIOR ACCOMPLISHMENTS

In March 1994, the Center for Innovative Technology, the Department of Information Technology and the Disability Services Agencies developed a Cooperative Agreement (Appendix D). Mutual opportunities for technology development and application were explored and recommendations were made for implementing assistive technology opportunities within the Center for Innovative Technology targeting strategies for developmental research. In an attempt to partner with assistive technology manufacturers located in Virginia, an Assistive Technology Business Roundtable was established. At that time, the number of Virginia companies manufacturing assistive technology devices was limited. However, with the Commonwealth's focus on economic development and the rapid advances in technology, it is now time to renew and intensify a partnership with representatives from this sector. These efforts should result in the expansion of the assistive technology industry in Virginia, and through a targeted awareness campaign it is anticipated that high-technology companies will consider adapting selective technologies to ensure that all Virginians have access to their products and services.

Although the 1994 agreement has expired, it raised the level of awareness of the needs of persons with disabilities and served as a catalyst for other related initiatives. Just prior to the cooperative agreement, the Council on Information Management, in collaboration with the Virginia Assistive Technology System, developed the Technology Assistance for Individuals with Disabilities Policy (COV ITRM Policy 92-1, updated February 1996) (Appendix E) for the purpose of providing equal technology access for individuals with disabilities through the review, evaluation and procurement of information technology resources.

Other initiatives have since transpired that directly support these efforts. In 1999, §2.2-3500 *et. seq.* of the Code of Virginia created the Information Technology Access Act, to ensure access to information technology by blind people through adoption of procurement standards for equivalent access by both visual and nonvisual means.

CURRENT INITIATIVES

This year, HB 519, the Procurement of Information Technology and Telecommunications Goods Act, transferred the power to procure information technology goods and services of every kind from the Division of Purchases and Supply of the Department of General Services to the Department of Information Technology. As a partner in the Inter-Governmental Agency Agreement, the Department of Information Technology should ensure that all purchases of information technology comply with accessibility standards adopted by the Commonwealth.

It is recommended that during the 2003 legislative session, an amendment to §2.2-3500 *et. seq.* be introduced for the language be changed to include all Virginians with disabilities.

In the Governor's Strategic Plan for Technology for the Commonwealth, the implementation of "a customer-facing internet portal" is one of the strategic action steps. This will require Virginia to implement enterprise solutions that focus on the needs of citizens and businesses. The Commonwealth's portal and all state agencies within the portal must have Web sites that are intuitive, easy to use, and accessible, without jargon, confusing program names, and acronyms. VIPNet will implement this portal by creating common web site design templates for state agencies that comply with and exceed all accessibility and usability standards and a common look, feel, and navigation for agency Web sites. The Disability Services Agencies and the Department of Technology Planning anticipate working with VIPNet through the proposed Inter-Governmental Agency Agreement.

FUTURE OPPORTUNITIES

New technological advances demand a renewed, intensified partnership between the Disability Services Agencies, the Center for Innovative Technology, the Department of Information Technology, the Department of Technology Planning and users of assistive and information technology. The purpose of this partnership is to advance applied research on technology development, transfer and potential commercialization. This will provide opportunities for joint ventures through collaborative grant proposals, potential research endeavors and public awareness initiatives.

All stakeholders are committed to this endeavor and are in a position to make a contribution. The Disability Services Agencies can offer the unique expertise of the rehabilitation technologists and provide a pool of motivated users of assistive technology to field test devices and products. Virginians with disabilities can assist product developers and researchers to better understand the needs of persons with disabilities.

The Center for Innovative Technology's mission is to increase the commitment to the creation of knowledge, accelerate the transfer of that knowledge into the marketplace and promote the growth of entrepreneurial firms. The Center for Innovative Technology routinely interacts with technology companies and provides them with the business,

technical, financial, and networking assistance as well as access to research and development expertise in Virginia's colleges, universities and federal laboratories. Through existing statewide contacts, the Center for Innovative Technology can ensure that technology companies are aware of our efforts and resources, and that they are fully engaged in the process. The Disability Services Agencies are prepared to offer technical assistance on access to Virginia's manufacturers.

The Secretary of Technology could invoke his authority under § 2.2-226 (B)(3) of the Code of Virginia, as Chief Information Officer (CIO), to promulgate policies, standards, specifications and guidelines consistent with Section 508 of the Rehabilitation Act of 1973, as amended, as the standard for accessibility of information technology in the Commonwealth.

The Department of Technology Planning could develop a program for determining whether state agencies, institutions or political subdivisions of the Commonwealth are compliant with these policies, standards, specifications and guidelines. It is recommended that for those entities who are out of compliance, that the CIO further invoke his authority under §2.2-226 (B) (2) and require that they submit a plan and schedule for compliance.

The Department of Information Technology should ensure that all acquisitions of telecommunications and information technology goods and services meet all statutory requirements and technology standards adopted by the Commonwealth.

Appendix A

House Joint Resolution 218

[summary](#) | [pdf](#)**HOUSE JOINT RESOLUTION NO. 218**

Requesting the Secretaries of Technology and Health and Human Resources to work with representatives of technology industries to develop an action plan prescribing renewed partnerships among the Center for Innovative Technology (CIT), the Department of Information Technology (DIT) and rehabilitation agencies, including the Department of Rehabilitative Services, the Department for the Blind and Vision Impaired, the Department for the Deaf and Hard-of-Hearing and the Woodrow Wilson Rehabilitation Center, to strengthen cooperation in advancing research and new technologies to respond to the talents and needs of persons with disabilities.

Agreed to by the House of Delegates, January 31, 2002

Agreed to by the Senate, March 5, 2002

WHEREAS, in previous years, the Center for Innovative Technology, the Department of Information Technology and the agencies for which the Secretary of Health and Human Resources is responsible worked collaboratively to explore mutual opportunities for technology development and application and made recommendations for implementing the assistive technology opportunities within the Center for Innovative Technology targeting strategy for developmental research; and

WHEREAS, the Center for Innovative Technology and the Department of Information Technology made significant strides in identifying assistive technology adaptations among the Commonwealth's inventory of technology projects and sought to apply that information to assist Virginians with disabilities; and

WHEREAS, the previous partnership allowed rehabilitation agencies to act as resources for product developers and laboratories for field testing technology; and

WHEREAS, new technological advances demand a renewed, intensified partnership between rehabilitative engineers and specialists and representatives of the Center for Innovative Technology and the Department of Information Technology for the purpose of applied research on technology development, transfer and potential commercial values of such devices and field testing opportunities with highly-motivated users; and

WHEREAS, these new partnerships should also include joint ventures through collaborative grant proposals, potential research endeavors and public awareness collaborative ventures; and

WHEREAS, the Center for Innovative Technology and the Department of Information Technology should be commended for their previous efforts in furthering and disseminating technological advances that have improved the productivity and quality of life for all Virginians; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Secretaries of Technology and Health and Human Resources be requested to work with representatives of technology industries to develop an action plan prescribing renewed partnerships among the Center for Innovative Technology (CIT), the Department of Information Technology (DIT) and rehabilitation agencies, including the Department of Rehabilitative Services, the Department for the Blind and Vision Impaired, the Department for the Deaf and Hard-of-Hearing and the Woodrow Wilson Rehabilitation Center, to strengthen cooperation in advancing research and new technologies to respond to the talents and needs of persons with disabilities. The action plan should encourage high-technology companies in Virginia to consider adapting selective technologies into assistive technology devices to expand the gifts, talent and

productivity of persons with disabilities.

All agencies of the Commonwealth shall provide assistance to the Secretaries of Technology and Health and Human Resources, upon request.

The Secretaries of Technology and Health and Human Resources shall submit a report on the plan development, including past achievements, current initiatives and future opportunities, to the Disability Commission prior to the 2003 Session of the General Assembly.

The Secretaries of Technology and Health and Human Resources shall complete their work by November 30, 2002, and shall submit their written findings and recommendations to the Governor and the 2003 Session of the General Assembly as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

Legislative Information System

Appendix B

Proposed Inter-Governmental Agency Agreement



INTER-GOVERNMENTAL AGENCY AGREEMENT BETWEEN THE DEPARTMENTS OF
THE SECRETARY OF TECHNOLOGY AND THE DISABILITY SERVICES AGENCIES OF
THE SECRETARY OF HEALTH AND HUMAN RESOURCES

I. Parties

The parties involved in this Inter-Governmental Agency Agreement, hereinafter referred to as “the Agreement”, are Departments of the Secretary of Technology and the Disability Services Agencies of the Secretary of Health and Human Resources.

A. The Departments of the Secretary of Technology include:

Virginia’s Center for Innovative Technology (CIT)
Department of Information Technology (DIT)
Department of Technology Planning (DTP)

B. Departments of the Secretary of Health and Human Resources include:

Department of Rehabilitative Services (DRS)
Department for the Deaf and Hard of Hearing (DDHH)
Department for the Blind and Visually Impaired (DBVI)

II. Purpose

In order for Virginia’s Center for Innovative Technology, the Department of Information Technology, the Department of Technology Planning and the Disability Services Agencies to enhance further their cooperation in advancing research and technology to respond to the needs of Virginians with disabilities, the following initiatives will be undertaken by the departments. It is understood these agreements are not limiting and other needs will be addressed as appropriate.

This agreement is made for the purpose of promoting the development of assistive technology and practical applications of technology to promote the self-sufficiency and employability of Virginians with disabilities.

III. Administrator

James A. Rothrock, M.S. L.P.C., Commissioner of the Department of Rehabilitative Services is designated as the Administrator for this Agreement.

IV. Objectives and Responsibilities:

A. Collaborative initiatives among CIT and the DSAs:

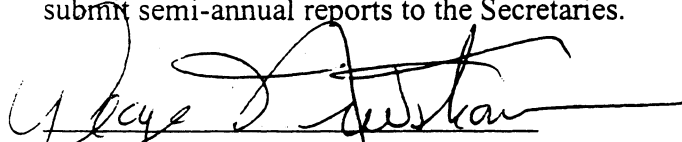
1. CIT will encourage researchers and manufacturers to consider the assistive technology (AT) needs of persons with disabilities in the design and manufacturing of their technologies. CIT will request, when appropriate, that grant applicants demonstrate possible applications for Virginians with disabilities.

2. CIT, with the federal technology-transfer agency, will foster the conversion of defense and space industry technology and funding to meet human needs, preserve jobs and address relatively untapped but growing markets.
3. The DSAs will provide product developers/researchers access to rehabilitation engineering expertise and technical assistance to ensure that the assistive technology needs of persons with disabilities are considered.
4. The DSAs will offer researchers access to their assistive technology laboratories to field test products.
5. CIT will assist DSA rehabilitation engineers to further develop their ideas and products toward commercialization and provide access to technical expertise at Virginia colleges and universities.
6. DSAs will identify new opportunities for assistive technology product development and potential markets.
7. CIT and the DSAs will promote public awareness of the benefits and applications of assistive technology in newsletters (INNOVATIONS, DRDiscovery), and other publications and presentations.
8. CIT will identify all of the projects that they have supported where technology benefited persons with disabilities (not necessarily by design) and host a meeting to showcase these efforts. This would involve a review of assistive technology projects with Principal Investigators from universities and the business partners.
9. CIT, in collaboration with the DSAs, will re-establish the Assistive Technology Business Roundtable (include policy makers from the state, vendors/manufacturers, researchers from the universities, and engineers). The purpose is to create a continuing dialogue between business and the AT community through a networking and problem solving forum. CIT could bring the business community to the table and serve as facilitator of the roundtable.
10. DSAs and CIT will collaborate to identify existing assistive technology vendors/ manufacturers within the Commonwealth. Contact will be established with our business partners to ensure that current information on their devices and services are included in the Virginia Assistive Technology System Resource Directory. A public awareness campaign will be developed to disseminate information on these partners to the disability community throughout Virginia.

B. Collaborative initiatives among the Departments of the Secretary of Technology and the Disability Services Agencies (DSAs):

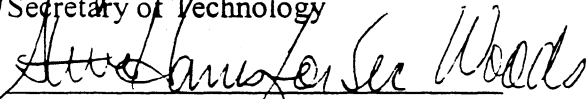
1. The Secretary of Technology will invoke his authority under § 2.2-226 (B)(3) of the Code of Virginia as Chief Information Officer (CIO) to promulgate policies, standards, specifications and guidelines consistent with Section 508 of the Rehabilitation Act of 1973, as amended, as the standard for accessibility of information technology in the Commonwealth.
2. DTP will develop a program for determining whether state agencies, institutions or political subdivisions of the Commonwealth are compliant. It is recommended that for those entities who are out of compliance, that the CIO further invoke his authority under §2.2-226 (B) (2) of the Code of Virginia, and require that they submit a plan and schedule for compliance.
3. The DSAs, in collaboration with DIT, will provide training and technical assistance, and disseminate information on the obligations of these entities to provide accessible information technology.
4. The DSAs, in collaboration with DIT, will establish assessment procedures for compliance of information technology access, and provide technical assistance to these entities to enable them to conduct self-evaluations. The DSAs will compile information from the self-evaluations and produce a status report regarding compliance to standards.
5. DIT will ensure that all acquisitions of telecommunications and information technology goods and services meet all statutory requirements and technology standards adopted by the Commonwealth.

The parties will work cooperatively to conduct an evaluation of this cooperative agreement and submit semi-annual reports to the Secretaries.



The Honorable George C. Newstrom
Secretary of Technology

Date: 12-16-02



The Honorable Jane C. Woods
Secretary of Health and Human Resources

Date: 12/17/02

Appendix C

**Recommended amendments to §2.2-3500
et. Seq., Code of Virginia**

§ 2.2-3500. Findings; policy.

A. The General Assembly finds that (i) the advent of the information age throughout the United States and around the world has resulted in lasting changes in information technology; (ii) use of interactive visual display terminals by state and state-assisted organizations is becoming a widespread means of access for employees and the public to obtain information available electronically, but access to this information for people with disabilities, has been overlooked in purchasing and deploying the latest information technology; (iii) presentation of electronic data solely in an inaccessible format is a barrier to access by individuals who are cognitively, sensory and/or physically impaired, preventing them from participating on equal terms in crucial areas of life, such as education and employment; (iv) alternatives, including both software and hardware adaptations, have been created so that interactive control of computers and use of the information presented is possible in accessible formats; and (v) the goals of the state in obtaining and deploying the most advanced forms of information technology properly include universal access so that the segments of society with particular needs will not be left out of the information age.

Deleted: nonvisual access, whether by speech, Braille, or other appropriate means

Deleted: visual format

Deleted: blind or visually i

Deleted: by both visual and nonvisual means

Deleted: (including individuals unable to use visual displays)

B. It is the policy of the Commonwealth that all covered entities shall conduct themselves in accordance with the following principles: (i) individuals who are cognitively, sensory and/or physically, impaired have the right to full participation in the life of the Commonwealth, including the use of advanced technology that is provided by such covered entities for use by employees, program participants, and members of the general public, and (ii) technology purchased in whole or in part with funds provided by the Commonwealth to be used for the creation, storage, retrieval, or dissemination of information and intended for use by employees, program participants, and members of the general public shall be accessible to all individuals, including people who are cognitively, sensory and/or physically impaired. The implementation of accessible technology under this chapter shall be determined on a case-by-case basis as the need arises.

Deleted: blind or visually

Deleted: adaptable for access by individuals who are blind or visually impaired.

Deleted: nonvisual access

(1999, cc. 769, 773, § 2.1-807; 2001, c. 844.)

§ 2.2-3501. Definitions.

As used in this chapter, unless the context requires a different meaning:

"Access" or "Accessibility" means the ability to receive, use, and manipulate data and operate controls included in information technology.

"Sensory impaired" individual means an individual who has: (i) a visual acuity of 20/200 or less in the better eye with correcting lenses or has a limited field of vision so that the widest diameter of the visual field subtends an angle no greater than 20 degrees; (ii) a medically indicated expectation of visual deterioration; or (iii) a medically diagnosed limitation in visual functioning that restricts the individual's ability to read and write standard print at levels expected of individuals of comparable ability, or is deaf, defined as those whose hearing is totally impaired or whose hearing, with or without amplification, is so seriously impaired that the primary means of receiving spoken communication is through visual input such as lipreading, sign language, finger spelling, reading or writing, or hearing impaired, defined as those whose hearing is impaired to an extent that makes hearing difficult but does not preclude the understanding of spoken communication through the ear alone, with or without a hearing aid.

Deleted: "
Deleted: Blind" or "visually

Deleted: .

Deleted: ¶
"

"Physically Impaired" means an individual with a medically diagnosed chronic, physical impairment, either congenital or acquired that may adversely affect physical functioning

"Cognitively Impaired" means an individual who has an impairment related to thinking, judgement and reasoning.

Covered entity" means all state agencies, public institutions of higher education, and political subdivisions of the Commonwealth.

"Information technology" means all electronic information processing hardware and software, including telecommunications. Electronic and information technology includes any product used to acquire, store, manipulate, or transmit information. This includes software applications and operating systems; Web-based information and applications such as distance learning; telephones and other telecommunications products; video equipment and multimedia products that may be distributed on videotapes, CDs, DVDs, or the World Wide Web; office products such as photocopiers and fax machines; calculators; and computer hardware.

"

Deleted: Nonvisual" means synthesized speech, Braille, and other output methods not requiring sight

"Telecommunications" means the transmission of information, images, pictures, voice or data by radio, video, or other electronic or impulse means, but shall not include public broadcasting services as defined in § 2.2-2427.

(1999, cc. 769, 773, § 2.1-808; 2001, c. 844.)

[previous](#) | [next](#) | [new search](#) | [table of contents](#) | [home](#)

Deleted: nonvisual
Deleted: access.

§ 2.2-3502. Assurance of Accessibly.

In general, the head of each covered entity shall ensure that information technology equipment and software used by cognitively, sensory and physically impaired employees, program participants, or members of the general public (i) provide access (including interactive use of the equipment and services) that is equivalent to that provided to individuals who are not cognitively, sensory and physically impaired; (ii) are designed to present information (including prompts used for interactive communications) in formats accessible, for use by people with cognitive, sensory and physical impairments; and (iii) have been purchased under a contract that includes the technology access clause required pursuant to § 2.2-3503.

Deleted: blind or visually

Deleted: blind or visually

Deleted: adaptable

Deleted: to both visual and

Deleted: nonvisual use

(1999, cc. 769, 773, § 2.1-809; 2001, c. 844.)

§ 2.2-3503. Procurement requirements.

A. The technology access clause specified in clause (iii) of § 2.2-3502 shall be developed by the Secretary of Technology and shall require compliance with the accessibility standards established in subsection B of this section. The clause shall be included in all future contracts for the procurement of information technology by, or for the use of, entities covered by this chapter on or after the effective date of this chapter.

Deleted: nonvisual

B. At a minimum, the accessibility standards shall have the capability of providing equivalent access to all forms of electronic and information technology devices and services used by persons who are not cognitively, sensory and/or physically impaired. A covered entity may stipulate additional specifications in any procurement.

Deleted: nonvisual

Deleted: include the following: (i) the effective, interactive control and use of the technology (including the operating system), applications programs, and format of the data presented, shall be readily achievable by nonvisual means; (ii) the technology equipped for nonvisual access shall be compatible with information technology used by other individuals with whom the blind or visually impaired individual interacts; (iii) nonvisual access technology shall be integrated into networks used to share communications among employees, program participants, and the public; and (iv) the technology for nonvisual access shall

Compliance with the accessibility standards shall not be required if the head of a covered entity determines that (i) the accessible information technology is not available and (ii) equivalence access is not available.

(1999, cc. 769, 773, § 2.1-810; 2001, c. 844.)

Deleted: by nonvisual means

Deleted: telecommunications or other interconnect

Deleted: ed network services

Deleted: blind or visually

Deleted: nonvisual

Deleted: nonvisual

Deleted: with nonvisual access because the essential elements of the information technology are visual a

§ 2.2-3504. Implementation.

A. The head of any covered entity may, with respect to accessible software or peripheral devices, approve the exclusion of the technology access clause only to the extent that the cost of the software or devices for the covered entity would increase the total cost of the procurement by more than five percent. All exclusions of the technology access clause from any contract shall be reported annually to the Secretary of Technology.

Deleted: nonvisual

B. The acquisition and installation of hardware, software, or peripheral devices used for accessibility when the information technology is being used exclusively by individuals who are not cognitively, sensory and/or physically impaired shall not be required.

Deleted: blind or visually

Deleted: nonvisual

C. Notwithstanding the provisions of subsection B, the applications programs and underlying operating systems (including the format of the data) used for the manipulation and presentation of information shall permit the installation and effective use of, accessible software and peripheral devices.

Deleted: nonvisual

(1999, cc. 769, 773, § 2.1-811; 2001, c. 844.)

Appendix D

1994 Cooperative Agreement

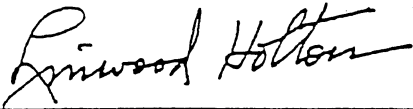
COOPERATIVE AGREEMENT BETWEEN THE DEPARTMENTS OF REHABILITATIVE SERVICES, VISUALLY HANDICAPPED, AND DEAF & HARD-OF-HEARING AND VIRGINIA'S CENTER FOR INNOVATIVE TECHNOLOGY

In order for the Departments of Rehabilitative Services (DRS), Visually Handicapped (DVH), Deaf & Hard-of-Hearing (DDHH) and Virginia's Center of Innovative Technology (CIT) to enhance further their cooperation in advancing research and technology to respond to the needs of persons with disabilities, the following agreements incorporate specific initiatives to be undertaken by the organizations. It is understood these agreements are not limiting and other initiatives will be addressed as appropriate.

These agreements are made for the purpose of promoting the development of assistive technology and practical applications of technology to promote the self-sufficiency and employability of individuals with physical and sensory disabilities.

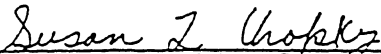
1. DRS, DVH, and DDHH will explore with CIT mutual opportunities for technology development and exploration. The selection will be a two-step process. First, DRS, DVH, and DDHH will identify appropriate technology-related opportunities to be presented to CIT. Simultaneously, CIT will review its "inventory" of technology projects to identify those that can be defined as "assistive technology" to be presented to the other-named agencies. The results will be to further define roles of each entity and appropriate types of collaborative ventures.
2. DRS, DVH, and DDHH representatives will meet with CIT Program Managers to review specific adaptations of select assistive technology devices for the purpose of exploring technology development, transfer, and potential commercial values of such devices. This meeting shall take place prior to April 30, 1994.
3. CIT will work with DRS, DVH, and DDHH to encourage high technology companies in Virginia to consider adapting select technologies into assistive technology devices to aid persons with disabilities.
4. CIT will make its Virginia Tech Information Center (VTIC) database available to DRS, DVH, and DDHH under appropriate terms and conditions. A review of the capabilities of this service will be presented for the appropriate staff by April 30, 1994.

5. CIT will make available space in its newsletter, INNOVATIONS, to highlight assistive technology stories in which DRS, DVH, and DDHH are interested.
6. Management from CIT, DRS, DVH, and DDHH shall meet annually to review and update the areas of cooperation to promote assistive technologies.



Linwood Holton, President
Center for Innovative Technology

Date: 3/1/94



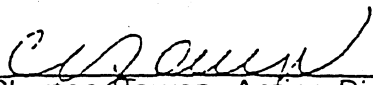
Susan L. Urofsky, Commissioner
Department of Rehabilitative Services

Date: 1/31/94



Donald Cox, Commissioner
Department for the Visually Handicapped

Date: 2/14/94



Clayton Bowen, Acting Director
Department for the Deaf and Hard-of-Hearing

Date: 2/9/94

cc: Secretary of Health and Human Services
Secretary of Education

Appendix E

COV ITRM Policy 92-1

Commonwealth of Virginia
Council on Information Management

ITRM Policy

Technology Assistance for Individuals with Disabilities

Revision: *Basic*
January 1, 1993

Preface

Quick Reference

- Authority
 - DTP Review Date
 - Definition
 - Effective Date
 - General Responsibilities
 - Objectives
 - Publication Designation
 - Purpose
 - Scope
 - Subject
 - Table of Contents
-

Publication Designation:

COV ITRM Policy 92-1

Subject:

Information Accessibility for Individuals with Disabilities

Effective Date:

January 1, 1993

Scheduled DTP Review:

One (1) year from effective date

Authority:

Code of Virginia, §2.1-563.31 (Powers and Duties of the Council on Information Management)

Code of Virginia, §2.1-563.17 (Powers and Duties of the Department of Information Technology)

Code of Virginia, §2.1-442 (Purchases to be Made in Accordance with Chapter 7 of Title 11 and Rules and Regulations of Division {of Purchases and Supply}; Exempt Purchases.)

APSPM, §1.3b (Acquisition of ADP, Word Processing and Related Telecommunications Products and Services and Other Telecommunications Services.)

Scope:

This policy is applicable to all State agencies and institutions of higher education (hereinafter collectively referred to as "state agencies") engaged in such functions as planning, managing, developing, purchasing, and using information technology resources in the Commonwealth.

Purpose:

To provide equal technology access for individuals with disabilities through the review, evaluation and procurement of information technology resources.

Objectives:

The objectives of this policy are to:

- Promote productivity.
- Enable job retention of employees who develop disabilities of visual, hearing, or mobility impairments into the work force.
- Facilitate the hiring and inclusion of those with disabilities of visual, hearing, or mobility impairment.

Definition:

Electronic equipment accessibility is the application/configuration of electronic office equipment in a manner which accommodates the functional limitations of individuals with disabilities so as to promote productivity.

General Responsibilities:

In accordance with the *Code of Virginia*, the following provisions apply:

The Department of Technology Planning (DTP)

Responsible for:

- Directing the development and promulgation of policies, standards, and guidelines for managing information technology resources in the Commonwealth.

Advisory Committees

Responsible for:

- Meeting with, conferring with and advising the Council in the development of the

Commonwealth's policies, standards, and guidelines for managing information technology resources.

Department of Information Technology (DIT)

Responsible for:

- Administering the procurement of information technology goods and services on behalf of all agencies and institutions of higher education.

All State Agencies

Responsible for:

- Cooperating with the Council in the performance of its powers and duties; and
- Complying with the Council's policies, standards, and guidelines for managing information technology resources in the Commonwealth.

Table of Contents

Section 1: Technology Assistance for Individuals with Disabilities Policy

Section 2: Available Resources for Technology Assistance Implementation

Section 1

Technology Assistance for Individuals with Disabilities Policy

Technology for accommodating the functional limitations of users with visual, hearing or mobility impairments is currently available using cost-effective enhancements to support access requirements.

It is the policy of the Commonwealth that agencies shall provide, where reasonable, equivalent technology access for employees with disabilities or prospective employees with disabilities to the extent that such needs are determined by the agency and the required electronic equipment accessibility can be provided by industry. Such accommodation should be provided unless the agency can demonstrate that it would impose an undue hardship on the operation of its program.

In determining what would impose an undue hardship on the operation of the agency, factors to be considered include:

1. The overall size of the agency's program with respect to the number of employees, number and type of facilities, and size of budget;
2. The type of agency operation; and
3. The nature and cost of the accommodation.

In providing equivalent access, agencies will consider:

- Access to and use of equivalent communications capabilities by employees, including those who have disabilities; and

- Utilization of enhancement capabilities for accessing and using computers to attain equivalent end results by employees, including those who have disabilities.

Information technology enhancements may include:

- Large print screen display
- Braille output
- Synthesized speech output
- Speech recognition
- Alternative keyboard input
- Audible display of screen prompts
- Screen display of audible signals

In reviewing, evaluating and procuring information technology resources, agency managers should consider the availability of such enhancement devices and capabilities. Procurement specifications have been written to support compliance with the Americans with Disabilities Act, The Virginians with Disabilities Act and the Civil Rights Act.

Section 2

Available Resources for Technology Assistance Implementation

The following services are available to assist agencies in technology assistance planning:

- The Virginia Assistive Technology System can provide support in the following areas:
 - Information search for assistive devices from a database containing more than 20,000 items.
 - Statewide information regarding service providers, including vendors, therapists, agencies, etc.
 - Funding information to provide options for financial assistance for assistive devices.
 - Training and written materials on funding, staff awareness and consumer responsiveness.
- The Department of Rehabilitative Services can provide support in the following areas:
 - Technical consultation from Rehabilitation Engineers for accessibility information.
 - Technical consultation from the Computer Systems Engineer specializing in computer accommodation.
- Other State agencies (Department for the Deaf and Hard of Hearing, Department for the Visually Handicapped, Department of Social Services) can provide disability specific support in the areas of:

- Technical consultation for accessibility information and injury prevention regarding work station design.
 - Technical consultation regarding computer accommodations.
 - Technical consultation on technology equipment for people with disabilities.
-

Printed copies of this publication may be obtained by contacting the Council, at the address shown below.

All policies, standards, guidelines, and technical advisories are available via the Internet, on the Commonwealth NetServer (CNS). The URL is <http://www.state.va.us/DTP/DTP.html>.

| [DTP Home](#) | [Virginia Home](#) |

***Department of Technology Planning
1100 Bank Street, Suite 901
Richmond, VA 23219
(804) 225-3622
Fax (804) 371-7952***

Updated February 14, 1996

