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APRIL 2010

Building Accessibility directly into the Global Internet: Making the Internet easier to use for people of all ages and abilities.

Date/Time:	Thursday, April 15, 2010, 11:45 AM – 1:00 PM
Speaker:	Gregg Vanderheiden Ph.D., Director Trace R&D Center
Location:	Rocky Rococo's Pizza, 7952 Tree Lane (Madison Beltline Hwy. at
	Mineral Pt. Rd.), 608.829.1444
Menu:	Pizza buffet, salad and soft drinks (\$5.00 members, \$10.00 non-
	members, free for UW-Madison student members)
RSVP :	by April 12th to Charles Gervasi via e-mail (cj@cgervasi.com)



Non-member guests are always welcome!

Broadband technologies are rapidly becoming integral to education, commerce, employment, community participation, health and safety Yet there remain multiple barriers to effective and affordable access by people with disabilities, elder, or those with low literacy creating an increasing digital divide. There are assistive technologies that can provide access for some. However it is not available for all disabilities, not affordable by many, and lags mainstream developments and deployments. Even when the latest AT is close to the latest IT, few people have the latest version. The cost of keeping up with mainstream technologies reduces resources available for innovation in assistive technologies and new directions in broadband technologies will require an already strapped AT industry to retool and re-architect their products. We are moving to an ICT environment with a profusion of hardware models (desktop, laptop, netbook, smartphone, tablet, set top box, game systems, players), multiple operating systems (Windows, Mac, Linux, Chrome OS, iPhone, Android, Windows Mobile, Symbian, Maemo (Nokia), Bada (Samsung), WebOS, etc.), hundreds of software applications that embed another universe of widgets, plug-ins, and players, and a networked information environment that adheres to no standard and mutates far beyond the initial conception of the Web. Our current access technologies and infrastructure cannot handle this; the assistive technologies that now exist do not address all disabilities well, particularly cognitive, language, and learning disabilities, deaf-blindness and the mixed problems faced by elders; current assistive technologies often add, rather than reduce, complexity; finally, but importantly, people are not aware of what is possible, see it as complicated, and do not have any easy way to determine that there is something that can help them.

A coalition of academic, industry and non-governmental organizations and individuals are coming together to promote the creation of a National Public Inclusive Infrastructure (NPII) to address these problems. The purpose is to ensure that everyone who faces accessibility barriers due to disability, literacy or aging, regardless of economic status, can access and use the Internet and all its information, communities, and services for education, employment, daily living, civic participation, health and safety.

An NPII would provide key software enhancements to the physical infrastructure to allow lower cost accessibility that could be invoked on any computer, anywhere. Its key components would be a cloud based delivery system that would allow anywhere, any computer access, a personal preference system to allow systems to automatically configure themselves to users, a system of wizards to make creation of a preference profile simple even when a professional is not available, a metadata server to allow users to find accessible media or captions or descriptions for inaccessible media, a trusted source for malware free solutions, a rich development environment with common building blocks, and an awareness program to make more people aware of what is possible for them. All of the NPII components are being designed to support both commercial assistive technologies and free, built-in access features (universal design). The NPII will include a delivery system, personalization profiles and a rich development system and common modules. In addition to lowering development costs and increasing the number of solutions for different disabilities, the NPII can also enable new types of assistive technologies and services, including assistance-on-demand services that allow consumers to invoke computer or human assistance whenever and wherever they need it. The goal is a richer set of access options that it is less expensive to create and distribute and that can address the needs of a wider range of disabilities than is possible today. And a model infrastructure that can be replicated internationally and bring this wide variety of access options and the lower cost delivery system for both commercial and free access features to countries world-wide.

Gregg Vanderheiden is a professor of Industrial and Biomedical Engineering, and director of Trace R&D Center at the University of Wisconsin-Madison. He has worked in technology and disability for more than 38 years and currently directs the NIDRR Rehabilitation Engineering Research Center (RERC) on Information Technology Access, and co-directs the RERC on Telecommunications Access (joint with Gallaudet University).

Dr Vanderheiden was a pioneer in the field of Augmentative Communication (a term taken from his writings in 1979), and worked with



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Dr. Vanderheiden has served on numerous professional, industry and government advisory and planning committees including those for the FCC, NSF, NIH, VA, DED, GSA, NCD, Access Board and White House. Dr. Vanderheiden served on the FCC's Technological Advisory Council, was a member of the Telecommunications Access Advisory committee and the Electronic Information Technology Access Advisory Committee (508 and 255 refresh) for the US Access Board, and served on the steering committee for the National Research Council's Planning Group on "Every Citizen Interfaces," and the National Academies' Institute of Medicine Committee on the Future of Disability in America.

He has received over 30 awards for his work on technology and disability include the ACM Social Impact Award for the Human-Computer Interaction Community, the Ron Mace Award, the Access award from AFB, the Yuri Rubinski Memorial World Wide Web Award (WWW6), and the Isabelle and Leonard H. Goldenson Award for Outstanding Research in Medicine and Technology (UCPA).

Social Psychology & Engineering

(tentative evening meeting - check website for updates)

Date/Time:	Wednesday, May 5, 2010, 5:30 – 7:00 PM
Speaker:	Dr. Michael Dalecki, Dept. of Sociology, UW-Platte-
	ville
Location:	UW-Madison, Mechanical Engineering Bldg, Rm
	ME1153
Menu:	TBD
RSVP :	by May 3rd to Charles Gervasi via e-mail (cj@cger-
	vasi.com)

Employee or Independent Contractor? — Déjà Vu All Over Again?

BY VIN O'NEILL

Organizations representing self-employed independent contractors are gearing up for another battle in a long and contentious war in Congress over the "common law test" that the Internal Revenue Service uses to decide whether workers should be classified as employees or as independent contractors for Federal tax purposes. This year's fight takes place in the midst of growing Federal and state budget deficits and widespread allegations that many businesses treat certain workers as independent contractors instead of as employees in order to avoid paying Medicare and unemployment insurance taxes and providing other benefits for these workers. To address these concerns, Congress and the Obama Administration are proposing new legislation and regulations intended to rewrite applicable tax code provisions and crack down on the misclassification of workers.

Here's some background on these initiatives and underlying worker classification issues.

Common Law Test - Under current law, the determination of whether a worker is an employee or an independent contractor is generally made using an extremely subjective common law test. This test includes 20 questions, the answers to which help to establish whether or not a worker is subject to the control of an employer or service recipient, not only with respect to the nature of the work performed, but also the terms and conditions under which the work is performed and related services are provided. (1)

Significant consequences — for individual and corporate taxpayers — can result from the classification of a worker as an employee or independent contractor. These consequences relate to withholding and employment tax requirements as well as a taxpayer's ability to exclude certain kinds of compensation from income or take tax deductions as ordinary business expenses. Some consequences favor employee status, while others favor independent contractor status. Employees, for example, are allowed to exclude the cost of employer-provided pension, health and life insurance benefits from gross income for Federal income tax purposes. Independent contractors, on the other hand, can establish their own pension plans and make tax-deductible contributions to those plans.

Significant tax consequences can also result if a worker is misclassified and subsequently reclassified as a result of an IRS audit. For employers and service recipients, such consequences may include penalties for failure to withhold taxes as well as disqualification of employee benefit plans. For workers, the consequences commonly include li-

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ability for self-employment taxes and denial of eligibility to deduct certain business-related expenses.

After years of contentious and often unresolved disputes between taxpayers and the Internal Revenue Service over employment tax classification decisions, Congress enacted a statutory alternative to the common law test in 1978.

Section 530 of the Revenue Act of 1978 — Section 530 allows taxpayers to treat workers as independent contractors, regardless of their employment tax status under the Common Law Test, if they have a reasonable basis for doing so. A reasonable basis includes a judicial precedent, a prior IRS audit or longstanding industry practice. If a taxpayer meets one or another of these criteria, the IRS is prohibited from reclassifying its workers as employees, even prospectively. Section 530 also prohibits the IRS from issuing regulatory guidance about the appropriate classification of such workers. (2)

Obama Budget Proposal — The Obama Administration's FY 2011 Budget proposal includes provisions that would allow the IRS to issue regulatory guidance on employment tax classification matters and to reclassify workers found to have been misclassified, even if such a reclassification would otherwise be prohibited under Section 530. (3)

To enforce this proposal, the President's budget earmarks \$25 million for 100 additional tax compliance officers. The IRS has already announced plans to audit 6,000 companies for compliance with current law.

The budget document anticipates that the resulting crackdown will generate at least \$7.3 billion in employment tax revenue over the next 10 years. A number of states, including California, Illinois, Massa-

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chusetts, Montana, New Jersey and New York, are also stepping up their enforcement of employment tax laws, often by enacting stricter penalties for taxpayers that misclassify workers. (4)

Current Congressional Initiatives — In addition to the President's regulatory reform proposal, key members of House and Senate tax-writing committees have introduced bills to modify existing statutes governing employment tax classification practices. Last year, Representative Jim McDermott (D-WA-07) and Senator John Kerry (D-MA) introduced the Taxpayer Responsibility, Accountability and Consistency Act of 2009. This legislation (S 2882/HR 3408) would amend relevant sections of the Internal Revenue Code and the Revenue Act of 1978 by expanding taxpayer reporting requirements, changing the Section 530 safe harbor rules and increasing civil penalties for noncompliance.

Similar legislation has been introduced in Congress in the past, only to die a slow death in the face of continuing disagreements about the best way to reform the always-contentious employment tax classification process. Proponents of employment tax classification reforms, including many AFL-CIO affiliated labor unions, have long argued that businesses deliberately misclassify employees as independent contractors in order to reduce their Federal and state tax obligations and avoid having to pay for overtime and other employee benefits.

Small businesses and self-employed workers in the construction, direct sales, transportation and computer consulting industries where the use of independent contractors is pervasive — are usually among the loudest critics of the proposed reforms. Although everyone agrees that the employment tax classification statutes could use greater clarity, there always has been and continues to be vehement disagreement on how best to codify and implement appropriate changes.

Section 1706 of the 1986 Tax Reform Act — Disputes about the proper classification of technical services workers, including engineers and computer specialists, that began in the early 1980s culminated in the enactment by Congress of Section 1706 of the 1986 Tax Reform Act.

Section 1706 effectively revoked the Section 530 Safe Harbor protections, but only for "engineers, designers, drafters, computer programmers, systems analysts and other similarly skilled workers" in brokered (three party) relationships involving individual workers, technical services providers (staffing firms) and client companies. As a result, workers who provided technical consulting services to clients through a staffing firm were once again obliged to comply with the 20-factor Common Law Test for employment tax classification purposes. (5)

Sustained efforts in the late 1980s and early 1990s by organizations representing independent contractors and self-employed consultants — including IEEE-USA and the National Association of Computer Consultant Businesses — to persuade Congress to repeal Section 1706 were unsuccessful.

Legislative Outlook — The 111th Congress and the Obama Administration seem determined to re-engineer current laws and regulations governing the classification of workers as employees or as independent contractors for Federal employment tax purposes. In view of the very real likelihood of Congressional action in the coming months, IEEE-USA will re-examine the need for an updated position on this controversial issue. Suggestions from readers on what position, if any, IEEE-USA should take will be very much appreciated.

Sources

1. Congressional Joint Committee on Taxation, Present Law and Background Relating to Worker Classification for Federal Tax Purposes (JCX-26-07), 7 May 7 2007.

http://www.irs.gov/pub/irs-utl/x-26-07.pdf

- 2. Section 530 of the Revenue Act of 1978 http://www.workerstatus.com/530text.html
- 3. Department of the Treasury, General Explanations of the Administration's FY 2011 Revenue Proposals (February 2010).

http://www.treas.gov/offices/tax-olicy/library/greenbk10.pdf

4. Steven Greenhouse, Federal and State Officials Crack Down on "Contractors" as a Tax Dodge, New York Times (Feb 18, 2010)

http://www.nytimes.com/2010/02/18/business/18workers.html

5. Department of the Treasury, Taxation of Technical Services Personnel: Section 1706 of the Tax Reform Act of 1986 (March 1991)

http://ia310833.us.archive.org/2/items/taxationoftechni01unit/taxationoftechni01unit.pdf

Vin O'Neill, as a Senior Legislative Representative, lobbies Congress and Federal regulatory agencies on professional careers issues, including education, employment, health care, immigration reform, offshore outsourcing, retirement security and tax issues of special concern to IEEE's US members.



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