

## Introduction

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The journal *Technology and Disability* is now published by IOS Press, of Amsterdam, The Netherlands. IOS Press has already established itself within the field of assistive technology, by publishing a series of books including "Advancement of Assistive Technology" – the first conference proceedings of the Association for the Advancement of Assistive Technology in Europe (AAATE). We expect this new business relationship to strengthen the journal's international presence. The editorial board for the next several years, also reflects the growing international participation in assistive technology. One-third of the members are from outside the United States.

In light of the new partnership with IOS Press, it is fitting that this issue of *Technology and Disability* is titled, "Research and Development in Europe." The European Commission's support for the field of assistive technology has generated a tremendous level of activity in the past decade. The issue authors represent the range of topics under investigation, and the breadth of collaboration between the nations of Europe. In fact, the number of quality submissions for this special issue prompted the editors to devote two issues to this topic. This issue is "Research and Development in Europe - Part I," with Part II to follow in several months.

Part I begins with Ballabio and Whitehouse providing an overview of the European Commission's approach to research and development in, "Aging and disability in the information society: A European perspective on research and technological development." They explain the rationale for the program, Telematics for Integration of Disabled and Elderly persons (TIDE), the primary source of funding for research and development programs. In fact, since 1990 about one hundred and thirty projects were sponsored under the TIDE initiative. The article shows how the European Commission is addressing the needs of people with disabilities and the elderly, and is particularly mindful of their converging functional needs. The examples demonstrate the long-term commitment necessary to successfully complete the research-development-commercialization process.

In "Lifetime adaptable housing in Europe," Nielsen and Ambrose explain how perspectives on the housing needs of people with disabilities have evolved over the past thirty years. Practices of designing and building

specialized housing have given way to ensuring mainstream housing designs accommodate the widest possible range of user needs. This approach accommodates the needs of children and seniors as well as people with disabilities. The paper surveys practices across eighteen countries, compares the results and identifies areas for additional progress in the design for all approach.

Access issues extend beyond the built environment to the electronic domain of information systems. Stephanidis and Emiliani provide a thorough review of the issues in, "Connecting to the information society: a European perspective." They consider historical developments in accessibility which have led to the concepts of universal access and a unified user interface. They authors assert that demonstrating technical feasibility is only part of the solution. For the accessible technology to reach the end user, it must achieve economic efficiency in the marketplace. International collaboration provides the necessary economies of scale to realize the potential of universal access in information technology.

Sjostrom and Rassmus look at accessibility from the perspective of people with visual impairments trying to access user interfaces that rely upon graphic displays. "The sense of touch provides new computer interaction techniques for disabled people," examines how new technologies enable haptics - using the sense of touch to exert control and obtain feedback - to translate graphic images into tangible shapes. This exploratory research has significant implications for mainstream computer use as well as for people without vision.

Some assistive devices are designed to support gainful activity, such as education or employment. Providing employment support for people with severe cognitive impairments requires attention to the immediate and long-term needs of the consumer. Furniss and co-authors describe a convenient system in, "A palmtop-based job aid for workers with severe intellectual disabilities." The article presents a series of single subject case studies, to demonstrate how the system assists the users and their job coaches, in the context of actual work settings.

This issue (and the next) only provides a sample of the on-going research and development programs in Europe. It represents an opportunity for readers to identify activity relevant to their own work, and to contact the authors and establish a dialogue. By extending our

understanding of work outside our traditional spheres, assistive technology.  
we hope to eventually realize a single global field of

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