

AEGIS

Open Accessibility Everywhere: Groundwork, Infrastructure, Standards

ISSUE 3

MAY 2010



At a Glance

Acronym:

AEGIS

Full Title:

Open Accessibility
Everywhere:
Groundwork, Infra-
structure, Standards

Contract No:

FP7-224348

Start Date:

September 2008

End date:

February 2012

Project Web Site:

[www.AEGIS-
project.eu](http://www.AEGIS-project.eu)

Editorial

The AEGIS Consortium is pleased to announce the third issue of the AEGIS Newsletter. The special focus of this third issue is on AEGIS' activities for user involvement in the project developments, especially regarding the forthcoming initial pilot tests, as well as initial implementation activities. The articles in this issue present the ongoing work, experiences, accomplishments, and lessons learned by the AEGIS partners. References to similar activities of relevant projects are equally provided.

This newsletter also provides an overview of past and forthcoming events where the project has or will be featured.

Finally, AEGIS can now also be followed through Twitter (<http://twitter.com/aegisproj>), so do visit our Twitter page and subscribe to our tweets!

Please feel free to contact us for any further details, comments, or just to share your experiences in the above fields of interest.

The AEGIS consortium

AEGIS (Open Accessibility Everywhere: Groundwork, Infrastructure, Standards) is a research project funded by the European Commission, working in the area of accessibility and independent living. AEGIS develops an Open Accessibility Framework (OAF) consisting of open source accessible interfaces and accessibility toolkits for developers, alongside accessible applications and open source assistive technologies for users. AEGIS will produce this framework through user research and prototype development with current and next generation ICT. This should deeply embed accessibility into future ICT for the open desktop, rich Internet applications, and mobile devices. AEGIS results will be referred to standards organisations where appropriate, and made available under open source licenses to the greatest extent possible.



The Project is co-
funded by the
European
Commission, 7th
Framework
Programme



Towards a deep understanding of the AEGIS users

AEGIS deliverable 1.1.2 presents the results of field studies and workshops held in Belgium, Spain, Sweden and the UK. With these field studies and workshops, the AEGIS Consortium aimed to gain a better understanding of the targeted users, their tasks and the context of the use of ICT in which they operate. Different viewpoints and individual characteristics that exist within the broad user base of ICT were addressed here, as well as discrepancies between the function of mainstream or AT/AAC technologies and users' expectations hereof. Both activities targeted end-users, end-user representatives (e.g. trainers), domain experts and developers.

The field studies consisted out of questionnaires covering AEGIS' three application domains: desktop solutions, rich internet applications (RIA) and mobile applications & devices. The results pointed out that the use of technology is reasonably widespread within each of the three application domains. However, the technologies and devices that would be most helpful for the end-users targeted by the AEGIS Consortium, are seldom reaching this target group. Instead, the interviewed end-users with impairments tend to own only the cheapest and/or outdated devices and technologies. Basic functionalities like editing documents, sending emails or text messaging are frequently used, but even here, many accessibility problems are encountered.

The field studies brought many recurring themes and arguments to light. These include anticipated issues like the cost of (assistive) technologies as well as less obvious barriers, such as the lack of training or instruction materials presented in a format that suits specific needs following specific impairments. Related to this lack of training is the general lack of knowledge: many interviewed end-users were simply unaware of available solutions.

Recent evolutions in desktop computing, mobile devices and rich internet applications hold much promise for another recurring theme, namely the need for customization or personalisation.

Practically all impairment user groups would benefit from simpler, more straightforward interfaces: menus, lists, etc. that can be configured towards personal needs and preferences. However, these new possibilities have not yet fully reached the end-users yet.

Another recurring theme, especially mentioned by the end-user representatives and developers, is the lack of open source initiatives or active communities in the field of accessible technologies. Also, on a more abstract or policy level, experts claim focus should be placed on allowing people to come to terms with their disability and then introduce them to specific technological solutions that could assist in their daily activities.

The outcomes of the workshops show that the development community is keen on embracing AEGIS, under the condition it remains an "open project". This implies involving development communities and organisations that promote open software, offering access to source code and publishing information throughout the entire course.

As a conclusion, the results from the field studies and the workshops indicate the need for a stable groundwork when considering accessibility, incorporating it into ICT products for all users rather than just the average user. Therefore, the insights from the field studies and workshops presented here form the foundation for prioritising the user requirements that will steer other activities within the AEGIS project when developing system and accessibility innovations.

AEGIS first pilot testing phase

The first evaluation phase of AEGIS is expected to start at the beginning of May 2010 and last until end of June 2010.

Within the framework of AEGIS first Pilot, 10 prototypes are going to be tested with users in the 4 test sites of AEGIS (KUL and EPR in Belgium, FONCE in Spain, SU-DART in Sweden and ACE and RNIB in the UK). In some cases, and when the maturity of the prototypes allows it, technical validation will be also held by the development teams of the technical solutions.

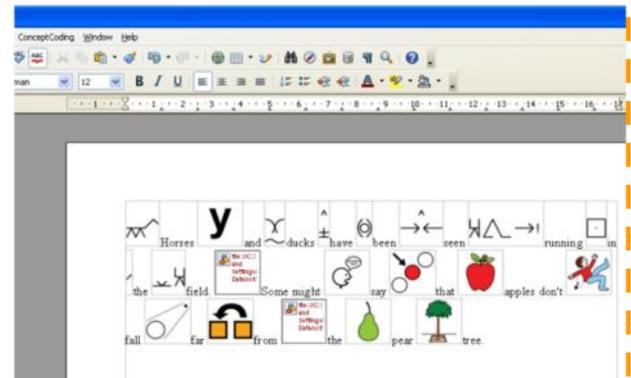
The prototypes to be tested with users during the first Pilots of AEGIS are the following:

- **Accessible Contact Manager** (by FVE) to be tested with 15 users with cognitive and speech impairments in Sweden, 30 users with cognitive, speech and motor impairments in the UK (10 per type of impairment), 2 users with cognitive and speech impairments and 8 users with motor impairments in Belgium, and 30 users with cognitive, speech and motor impairments in Spain (10 per type of impairment).

- The prototype is an interactive mock-up of the phone dialer and contact manager application. A special support feature is included for cognitive impairment users to allow them recognise each contact by graphical information (picture), textual (label) and audio feedback (voice of the contact).

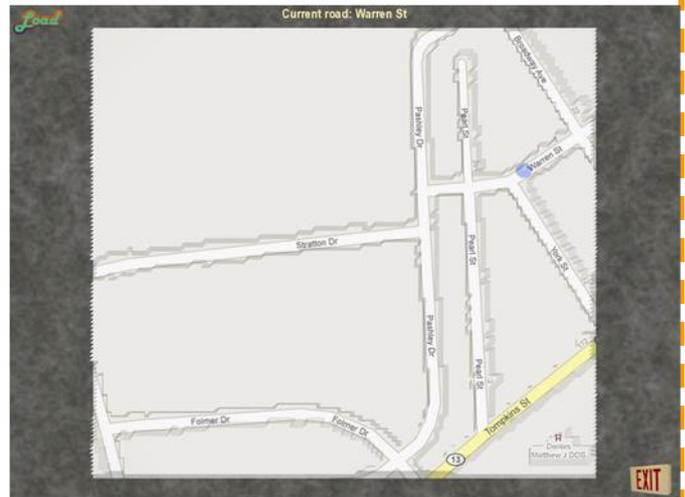


- **Concept Coding Framework OooSymbols** (by SU-DART) to be tested with 15 users with cognitive impairments and reading/language disorders (around half and half per type of impairment) in the UK, 15 users with cognitive impairments and reading/language disorders (around half and half per type of impairment) in Spain and 10 users with cognitive impairments and reading/language disorders (half and half per type of impairment).

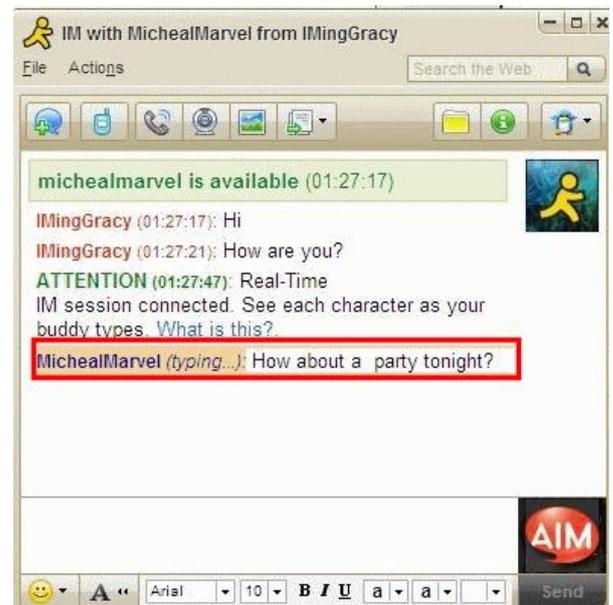


- The aim of this prototype is to make the text based environment of a standard Office application suite - OpenOffice.org (OO.org) - accessible as a productive tool also for users with more profound problems in relation to text - both in terms of writing and reading. This will be achieved by - in addition to text-to-speech reading support - providing graphical symbol support. Graphic symbols will illustrate the meaning of the words as they are entered into the text, or when text content is loaded from a file. The CCF plugin for OO.org is a real prototype, which comes packed in a msi install package for Windows or alternatively, a zipped file directory for other operating systems. It is supported on all platforms where OpenOffice is supported.
- **odt2daisy extension for OpenOffice.org** (by KUL) to be tested with 8 production centres representatives (2 per test site).
 - The aim of the DAISY Production prototype is to demonstrate that it enables end users to create digital talking books in DAISY format from an (accessible) ODF document.

- **AEGIS RIA (Rich Internet Applications) developer tool** (by CTU), to be tested with 2 RIA developers in Sweden, 2 RIA developers in the UK, 5 RIA developers in Belgium and 5 RIA developers in Spain.
 - This prototype presents the basic idea of the accessibility support for RIA application developers. It incorporates the AEGIS UI component set allowing the developer to implement accessibility RIA application (DHTML/Java based). It will simulate the development process in a framework of NetBeans IDE. During the development the mockup of the ODT will help the developer with accessibility issues.
- **GnomeShell Magnifier** (by ATRC), to be tested with users with visual impairments (13 in the UK, 10 in Belgium and 7 in Spain).
 - Several features that have been implemented so far in the GnomeShell Magnifier will be tested. These are namely the Magnification Factor, the Full-screen feature, Moveable Lens feature and the Scroll at Screen Edges feature.
- **Haptic RIA Maps** (by CERTH/ITI), to be tested with 10 visually impaired users in the UK, another 10 in Belgium and 4 evaluators in the UK and Spain (2 per site).
 - The aim is to provide the visually impaired users with an easy way to use means of accessing conventional 2D maps. The user can interact with the produced 3D model of the map and examine its properties.
 - The developed framework analyzes the map image so as to obtain the enclosed information. While navigating, audio messages are displayed providing information about the current position of the user (e.g. street name).
- **Open Speech Access** to the GNOME Desktop Environment (by RNIB), to be tested with 30 blind persons (2 in Sweden, 18 in the UK and 10 in Belgium).
 - In this case, the aim is to test the existing Orca screen reader with open desktop applications, the Firefox web browser, including ARIA enabled applications. Also to test the screen reader customisation functionality. The Orca screen reader enables a user with no vision to use the GNOME Desktop and associated applications. The screen reader enables non-visual access to standard applications in the GNOME Desktop by using speech and braille output. Orca has a configuration interface, which is essentially the 'user interface' to the application, which enables the user to change the settings for the application. These settings modify the functionality of Orca to suit to the users' preference.



- **AOL Instant Messenger** (by AOL) to be tested with 3 users with speech impairments in Sweden, 10 users with hearing impairments and 10 users with speech impairments in the UK, 2 users with hearing impairments in Belgium and 10 users with hearing impairments and 10 users with speech impairments in Spain.
 - The AOL Instant Messenger application has not been developed in AEGIS. However, in the context of AEGIS, a proof of concept with users will take place in order to get feedback about the real-time-text features that have been implemented therein, in order to apply or not in AEGIS relevant work (<http://dashboard.aim.com/aim>).
- **Oratio for BlackBerry** (by RIM), to be tested with 2 users with visual impairments and 2 users with speech impairments in Sweden, 5 users with speech impairments and 10 users with visual impairments in the UK, 10 users with visual impairments in Belgium and 20 users with visual and speech impairments (10 per type of impairment) in Spain.
 - Oratio for BlackBerry is a screen reader written in Java for BlackBerry smartphones and developed jointly by HumanWare and CodeFactory. It is designed to enable blind, partially sighted and print disabled customers to access and operate BlackBerry smartphones with QWERTY keyboards. For more information on Oratio for BlackBerry, visit www.humanware.com/oratio. Although it has not been developed in the context of AEGIS, no technical validation is applicable in this case, a proof of concept with users will take place in order to get feedback about the screen reader features that have been implemented therein, in order to apply or not in AEGIS relevant work.



- **TTS Sample files for language evaluation** (by SILO), to be evaluated by 10 users (with cognitive, speech and language impairments) in Spain, 10 users with cognitive impairments and 10 blind users in the UK, 3 blind users, 3 users with cognitive impairments and 4 users with speech impairments in Belgium and 3 blind users, 3 users with cognitive impairments and 4 users with speech impairments in Spain.
 - The Text-to-speech on desktop prototype from SILO is not a real prototype. It is actually a series of audio files (mp3 files). The aim of this prototype is to test the language quality and intelligibility of the eSpeak TTS engine, in an effort to collect feedback from end users about their overall user satisfaction from the TTS and about particular elements of the TTS that need to be improved in the languages of the 4 AEGIS pilot sites.

The evaluation with users will encompass specific performance testing designed for each prototype, in the context of which sound and video recording sessions will be organised (given the consent of the participants), together with screen capturing, whenever applicable, in order to allow later in-depth analysis of the trials realised.

The tests supervisors, applying the applicable protocols (i.e. Think-Aloud and Co-discovery) will monitor the performance testing and will record performance and comments coming from the users through service diaries. After the completion of the users' performance testing, a series of short subjective forms (encompassing standard scales and free, prototype-specific questions) will be answered by the users with the assistance of the tests supervisors. Depending on the type of impairment of the user, but also each individual case, the subjective forms will be answered in the form of interviews or printed questionnaires.

At the end of the performance testing with users, focus groups consisting of tutors, expert and trainers (of relevant to the prototypes areas expertise) will be organised, locally in each test site. In the context of the focus groups, the moderators of the discussion will demonstrate the prototypes (under evaluation) and will give the opportunity to the participants to play freely with them. Free discussions will be held afterwards during which the experts will be requested to give their opinion (on a set of pre-defined questions and beyond) orally and written.

The overall evaluation framework, the abstract one, as well as the specific experimental plans for the first evaluation phase of AEGIS has been reported in deliverable 1.5.1: "Novel framework and supporting material for the inclusive evaluation of ICT", which is public and will be uploaded on the project web site, upon approval by the EC.

The results of the first evaluation phase will be consolidated and translated, when applicable, to feedback guidelines that will allow the developers of the tested prototypes to optimise their solutions and get ready for the next evaluation phase of AEGIS that is scheduled to start around Month 26 (October 2010)-Month 27 (November 2010), being in line with the iterative UCD plan adopted in the project.



AEGIS delivers ...

OPENOFFICE.ORG CAN READ IN UP TO 27 LANGUAGES !

With Odt2DAISY, OpenOffice.org can produce Full DAISY Books, the world's most widely used talking book format

In the context of the AEGIS project, the team of K.U. Leuven launched a software add-on that makes it easier to create digital talking books with free and open-source software.



Odt2DAISY, designed for OpenOffice.org(TM) 3.0 or higher, enables the export of documents into digital talking books in the DAISY format.

DAISY is the standard for Digital Talking Books, developed and maintained by the DAISY Consortium and was adopted by NISO as a ANSI/NISO standard (Z39.86). Digital talking books are used by persons with a visual impairment, dyslexia or other impairments that hamper access to printed text.

The odt2daisy project is supported with the financial contribution of the European Commission in the context of the AEGIS project. Partners involved in ODF-related work in AEGIS include Sun Microsystems, Inc. and Katholieke Universiteit Leuven.

GeneralOdt2DAISY is a free and open source software that can be downloaded at <http://odt2daisy.sf.net>. Odt2DAISY can be run on most platforms, including:

- Windows (XP, Vista and Windows 7)
- Mac OS X (Tiger, Leopard, Snow Leopard)
- Linux
- Solaris(TM) and OpenSolaris(TM)

After installation, the user will have the possibilities to export in both DAISY XML and Full DAISY (containing both XML and audio).

DAISY 3.0 XML

Odt2daisy enables authoring of rich DAISY 3.0 XML files with multilingual¹ content.

You can convert DAISY XML to several other formats using tools like the DAISY Pipeline, for instance:

- DAISY Text Only books
- Full DAISY books (Text and Audio)
- Large Printing books
- Braille books

More information about the DAISY Pipeline is available at <http://www.daisy.org/projects/pipeline/>.

Full DAISY (Text and Audio)

Odt2daisy enables authoring of rich Full DAISY books (Text and Audio) with multilingual content. It uses the TTS engines installed on the user's operating system. For this reason, "Export As Full DAISY" feature can provide different books quality, depending on your platform or your TTS licenses.

On English versions of Windows, the user can author Full DAISY books in English out of the box. It is also possible to author Full DAISY books in other languages if third-party voices compatible with SAPI 5 (including Cepstral, Acapela, and Dolphin TTS products) are available on the computer.

On Mac OS X, the support is the same, except that the voices should be VoiceOver compatible.

On Linux, Solaris and OpenSolaris, odt2daisy relies on the eSpeak TTS engine. The user can generate content in up to 27 languages including English, French, German and Spanish. Third-party voices from Loquendo and IBM can also be used.

Quality Assurance

Since the software should be usable by persons without DAISY expertise, quality assurance is an important aspect of odt2daisy.

The Export As DAISY XML feature includes a DAISY 3.0 DTD validation process. The Export As Full DAISY feature includes a ZedVal Validation process.

Odt2daisy developments are now driven by unit tests. A set of 165 ODT files that covers the full ODF specification is used for regression testing.

Notable Results

Vincent Spiewak started odt2daisy in January 2008 under the name odt2dtbook. The project won a gold Award from the OpenOffice.org Community Innovation Program 2008. It is currently used among others by BrailleNet, Curtin University Centre for Accessible Technology (CUCAT), Alternative Media Access Centre at the University of Georgia (AMAC), Association for the Blind of Western Australia (ABWA) and the Wyoming Department of Education.

DAISY format features

DAISY features include:

- the ability to navigate to specific pages and sections
- adding, searching for, and removing bookmarks
- the ability to skim the text
- portability

Playing DAISY

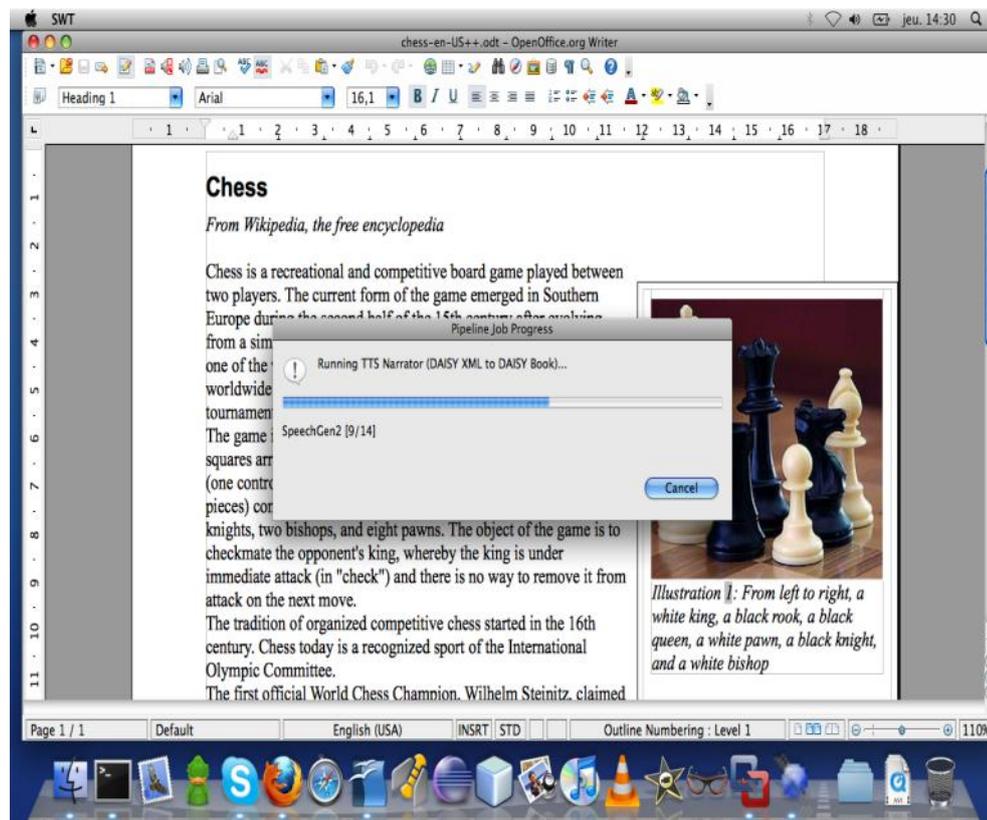
- Requires a DAISY player (software or hardware)
- Software and hardware players available
 - Software - free to \$300
 - Hardware - \$195 to \$995
- DAISY players also play MP3 files
- DAISY players allow you to control speed and pitch

Freely available software players include:

- AMIS (for Windows: <http://www.daisy.org/projects/amis/>),
- AnyDAISY (cross-platform add-on for Firefox: <https://launchpad.net/daisyextension>),
- Emerson-reader (cross-platform: <http://code.google.com/p/emerson-reader/>),
- Olearia (for Mac OS: <http://www.cucacat.org/projects/olearia/>),
- ButtercupReader (web-based: <http://www.buttercupreader.net/default.htm>),
- Dorina Daisy Reader (add-on for Firefox: <https://addons.mozilla.org/en-US/firefox/addon/9276>).

DAISY

DAISY is the standard for Digital Talking Books, developed and maintained by the DAISY Consortium and was adopted by NISO as a ANSI/NISO standard (Z39.86). It is the world's most widely used format for Talking Books for blind, visually impaired, print-disabled or learning-disabled people.



Export as Full DAISY on Mac OS X Leopard - Voice generation process

DAISY is:

- DAISY Standard: An open-source standard for digital audio
- DAISY Consortium: Group that oversees the standard
- DAISY format: The format for DAISY books
- DAISY books: Electronic books in the DAISY format

About OpenOffice.org

The OpenOffice.org Community is an international team of volunteer and sponsored contributors who develop, translate, support, and promote the leading open source office productivity suite, OpenOffice.org. OpenOffice.org's leading edge software technology (UNO) is also available for developers, systems integrators, etc. to use in OpenOffice.org extensions or in their own applications. OpenOffice.org uses the OpenDocument Format OASIS Standard (ISO/IEC 26300) as well as supporting legacy file formats such as Microsoft Office, and is available on major computing platforms in over 100 languages. OpenOffice.org software is provided under the GNU Lesser General Public Licence (LGPL) and may be used free of charge for any purpose, private or commercial. The OpenOffice.org Community acknowledges generous sponsorship from a number of companies, including Sun Microsystems, the founding sponsor and primary contributor. OpenOffice.org is considered by Public administrations and people working at all levels of government (local / federal / regional / national etc) as their ideal software solution.



AEGIS at CSUN 2010

The 25th Anniversary of the CSUN Conference on Technology and Persons with Disabilities was held in the week of 22-27 March 2010 at the Manchester Grand Hyatt hotel in San Diego, USA. A major theme this year was ARIA (Accessible Rich Internet Applications), both as a concept, and as the W3C API specification. There were several sessions relating to ARIA, with multiple tools vendors and also Adobe endorsing it. IAccessible2 (PDF Reader & Flash Player & Flex/AIR will support IAccessible2 on Windows (and also AT-SPI on GNOME/Linux)). This year also saw significant increased interest in open source accessibility - with multiple sessions, and two booths on the show floor - one hosted by the Mozilla Foundation and the other by the GNOME Foundation. Several AEGIS consortium members attended CSUN and participated in the following presentations:

1. March 24, 2010: [AEGIS update: the first 18 months of the project](#)
 - Peter Korn Oracle; Karin Slegers Catholic University of Leuven
 - [AEGIS update: the first 18 months of the project - slides](#)
 - We gave an overview of the 18 months AEGIS project progress; we had good interest from attendees, and had specific questions from Shadi Abou-Zahra of the W3C WAI who would like to see sharing of the AEGIS personas with those developed by the W3C.



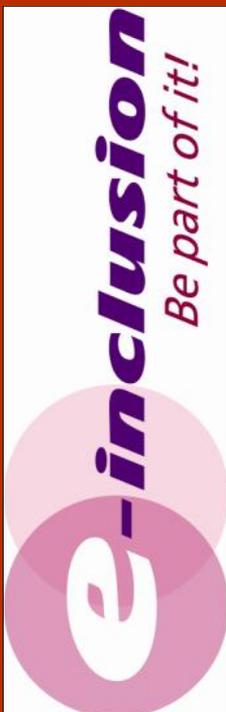
2. March 24, 2010: [Simulating vision impairments for Java/Swing developers using the NetBeans IDE](#)
 - Peter Korn, Oracle
 - [Simulating vision impairments for Java/Swing Developers using the NB IDE - slides](#)

We gave a general background of the ACCESSIBLE FP7 (AEGIS related) project from which the NetBeans plugin-in came from, and then spent the bulk of the half hour slot on an extended demonstration. The ability to demonstrate a broad range of vision impairments, coupled with the direct connection to the accessibility errors in the code and an easy facility to fix them was well received.

3. March 25, 2010: [Topics in Java and OpenDocument Accessibility](#)
 - Peter Korn, Oracle
 - [Topics in Java and OpenDocument Accessibility - slides](#)

- The majority of the talk was about OpenDocument accessibility & demos of creating DAISY books and Concept Coding Framework support for creating documents for people with cognitive impairments. Audience members were interested in having a free & open source alternative for creating DAISY books, and one attendee was particularly keen on us providing a clear statement that DAISY format XML files are useful in DAISY players, but aren't a "universal accessibility format" that automatically work with screen readers.
4. March 26, 2010: Making Rich Internet Applications Accessible Through JQuery
 - Chris Blouch, AOL, Inc.; Hans Hillen, The Paciello Group
 - [Making Rich Internet Applications Accessible Through JQuery](#) - slides (on wikis.sun.com)
 - This session was explicitly focused on work on UI component accessibility and AJAX implementation, and this presentation credited FP7 and AEGIS with helping support this work. The presentation had three parts: (1) why jQuery; (2) the work they have done; and (3) demos. Presenters noted that jQuery adoption as measured by Google queries has been taking off, particularly compared to other UI toolkits such as Dojo and others. They also noted AOL's use of it, and the existence of work done by others prior to them on accessibility (ATRC from UToronto).
 5. March 24, 2010: Designing Accessible & Usable Application User Interfaces for Mobile Phones
 - Greg Fields, Research In Motion (RIM)
 - [Designing Accessible & Usable Application User Interfaces for Mobile Phones](#) - slides
 - This presentation identified best practices in mobile application UI design that can help to improve the usability of mobile phone applications for all users.
 6. March 25, 2010: Creating Close Captioned Content for BlackBerry Smartphones
 - Greg Fields, Research In Motion (RIM)
 - [Creating Close Captioned Content for BlackBerry Smartphones](#) - slides
 - This hands-on lab will demonstrate how you can develop, deploy and distribute accessible, close captioned multimedia content for and to BlackBerry Smartphones.

Along with the conference and AEGIS presentations, separate discussions and meetings were held. The most AEGIS related meeting was the GNOME Accessibility Hackfest held on March 23, 2010 focused mainly on the three main topics: GNOME desktop accessibility testing and their automatization, where the priority is writing tests, which will live in the test subdirectory of each GNOME module; Accessibility leadership discussion and GNOME 3.0 and everything that needs to be addressed related to accessibility for the shift to GNOME 3. The key GNOME community members and open projects leads were present (i.e Orca, GNOME Accessibility Project, AT-SPI, LDTP, VizAudio communities) as well as current Sun Microsystems/Oracle accessibility engineers, and SingularLogic representatives. More information can be found at: <http://live.gnome.org/Accessibility/Hackfest2010>.



We were there too!

DAISY 2009

KULeuven DOCARCH presented “Odt2DAISY: Authoring Full DAISY Books with OpenOffice.org” at the DAISY 2009 Technical Conference (www.daisy2009.de) on 24-25 September 2009 in Leipzig, Germany. The presentation addressed the fact that Odt2DAISY is an extension for OpenOffice.org, the open-source office suite. It enables users to export DAISY 3 with audio from OpenOffice.org Writer. It includes support for mathematical content (MathML). Odt2DAISY works on Microsoft Windows, Mac OS X, Linux and Solaris. It relies on the operating system's text-to-speech engine(s) to generate audio, so the supported languages depend on the TTS engines available on the user's system.



OOoCon 2009

KULeuven DOCARCH also presented “OpenOffice.org can speak using odt2daisy !” at the OpenOffice.org Conference 2009, in Orvieto, Italy on 3-6 November 2009. The presentation focused on how OpenOffice.org with odt2daisy is now able to produce DAISY 3.0 XML books and Full DAISY Books (XML + Audio). DAISY is the standard for Digital Talking Books, developed and maintained by the DAISY consortium and was adopted by NISO as a ANSI/NISO standard (Z39.86). It is the world's most widely used format for Talking Books for blind, visual impaired, print-disabled or learning-disabled people. OpenOffice.org with odt2daisy is therefore the only rich, cross-platform, accessible, free and open source authoring environment for DAISY books, which would be a tremendous addition to the disability community. odt2daisy enables authors to produce audio using the Text-To-Speech engine available on the operating system.

TECHSHARE



RNIB gave a general presentation of AEGIS at the Techshare India Conference, on 15th February 2010, at the India Habitat Centre in New Delhi, India.

The project will also participate in following events:

ICCHP2010



KULeuven DOCARCH will present the “Generating DAISY Books from OpenOffice.org” and “Generating Braille from OpenOffice.org” at the 12th International Conference on Computers Helping People with Special Needs (ICCHP2010) in Vienna, Austria on 14-16 July 2010. odt2daisy is an extension for OpenOffice.org, the open-source office suite. It enables users to export DAISY 3 and DAISY 2,02 with audio from OpenOffice.org Writer. It includes support for mathematical content (MathML) and works on Microsoft Windows, Mac OS X, Linux and Solaris. odt2braille is an extension for OpenOffice.org, the open-source office suite. It enables users to export or print to Braille from OpenOffice.org Writer. It relies on the open-source libraires liblouis and liblouisxml. Similar support for OpenOffice.org Calc (spreadsheets) and OpenOffice.org Impress (presentations) is also planned.

ISAAC 2010



ACE and SU-DART will present “The AEGIS Open Source Project - What's in it for AAC?” at the 14th Biennial Conference of the International Society for Augmentative and Alternative Communication (ISAAC) in Barcelona, themed Communicating Worlds on 24-29 July 2010. The presentation will go deeper in how AEGIS aims to introduce accessibility and usability into mainstream developer's tools. In particular AEGIS will add symbol support, complemented by text-to-speech, for a standard office software environment (OpenOffice.org) and enable mobile phones to be used more generally as AAC communication devices.



Our Publications

The following provides an overview of published papers related to the AEGIS project:

“Authoring Full DAISY Books with OpenOffice.org”

(www.daisy2009.de) was presented in the “DAISY 2009 Technical Conference” (www.daisy2009.de), held in Leipzig, Germany, September 2009, with the following authors: Vincent Spiewak, Christophe Strobbe of KUL. The paper proposes an extension for OpenOffice.org, the open-source office suite, it enables users to export DAISY 3 with audio from OpenOffice.org Writer and it includes support for mathematical content (MathML).

In the “OpenOffice.org Conference 2009” the paper “OpenOffice.org can speak using odt2daisy !” was published, written by Vincent Spiewak of KUL, and held in Orvieto, Italy, November 2009. The authors join OpenOffice with odt2daisy allowing it to produce DAISY 3.0 XML books and Full DAISY Books (XML + Audio). OpenOffice plus odt2daisy is the only rich, cross-platform, accessible, free and open source authoring environment for DAISY books, and represents a tremendous addition to the disability community.

In “Free and Open Source Software - for Accessible Mainstream Applications”, satellite event of European Joint Conferences on Theory and Practice of Software”, in Paphos, Cyprus, March 2010, following papers were presented:

- Karel Van Isacker, (EPR) AEGIS - ACCESSIBLE: Users Involvement Driving Accessibility Forward
- Evangelos Bekiaris, Maria Gemou (CERTH-HIT), Use Cases towards All Inclusive Mainstream ICT
- Thanos Tsakiris, Konstantinos Moustakas, Dimitrios Tzovaras (CERTH-ITI), Improved Accessibility in Maps for Visually Impaired Users
- Jan Vystrcil, Zdenek Mikovec, Miroslav Karsulin, Jaroslav Kucera (CVUT), Incorporating ARIA into Web Toolkit



- Mats Lundälv, Bengt Farre, Annika Brännström, Lars Nordberg (SU-DART), Open-Source Concept Coded Graphic Symbol support in OpenOffice.org
- Christophe Strobbe, Vincent Spiewak, Jan Engelen (KUL), Odt2DAISY: Producing Digital Talking Books with Open-Source Software
- Evangelos Bekiaris, Kostas Kalogirou, Maria Gemou (CERTH-HIT), Java User Interfaces for Accessible Mobile Applications
- Jon Azpiroz, Puerto Asensio (VFE), Iván Carmona, Rosana Sánchez (TECHNOSITE), María Fernanda Cabrera, Giovanni Del Grosso (UPM), Designing Mobile Applications for All: Accessible Contact Manager

All presentations can be accessed via <http://www.slideshare.net/aegisproject>.

During the “4th European eAccessibility Forum : eAccessibility of Public Services in Europe”, Paris France, April 2010, two papers were introduced: **“Creating Daisy Books with Open Office and Odt2DAISY”** written by Christophe Strobbe, Vincent Spiewak of KUL, and **“AEGIS European Project, developing infrastructure, developer’s tools, assistive technologies under an open source software license”** by Christophe Strobbe. The latter paper focuses on how ICT can provide opportunities to integrate people who are at risk of exclusion, nonetheless may lack in usability or accessibility for certain groups of users.

The objective is to respond to these trends by "mainstreaming and radically improving the accessibility and usability of new ICT solutions."

The paper **“Generating DAISY Books from OpenOffice.org”**, written by Christophe Strobbe, Jan Engelen, Vincent Spiewak, from KUL, was presented in the “12th International Conference on Computers Helping People with Special Needs”, Vienna, Austria, July 2010. The paper enables users to export DAISY 3 and DAISY 2,02 with audio from OpenOffice Writer. It includes support for mathematical content (MathML) and works on Microsoft Windows, Mac OS X, Linux and Solaris;

During the “International technology and people with disabilities conference 2010” Nicky Sulmon, Karin Slegers, Karel Van Isacker, Maria Gemou, Evangelos Bekiaris presented **“Using Personas to capture Assistive Technology Needs of People with Disabilities”**. In this paper, “personas” were created to capture the problems and needs of people with disabilities with respect to the use of mobile applications, desktop applications and rich internet applications. Personas are descriptions of fictional, archetypical users, based on true data and stories of real users.

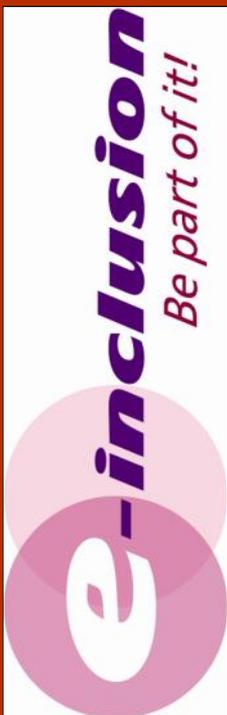


AEGIS launches Twitterpage

AEGIS now also has its own Twitter page at twitter.com/AEGISproj. An accessible variant can be accessed via www.accessibletwitter.com. All news is automatically also tweeted do your Twitter page once you subscribe to our newstweets.



AEGIS project Twitter page



Activities of ACCESSIBLE project

ACCESSIBLE is an EU FP7 project spanning over 36 months, start date 1st September 2008, with the aim of improving the accessibility of software development products, by introducing a harmonised accessibility methodology into accessible software development processes, using significantly better measurement strategies, methodologies, etc. The envisaged improvement will enable large organisations, SMEs or individuals (developers, designers, etc.) to produce software products of superior accessibility and usability, accompanied with appropriate measures, technologies and tools that improve their overall quality.

OPEN CALL FOR EXPERTS

The ACCESSIBLE project is implementing specific methodologies and tools for ensuring accessibility for designers and software developers. An **open call for experts** has been launched for supporting the evaluation of the envisaged project results (evaluation of Assessment tools, developer designer aid module, and the Harmonized methodology). The target is to receive feedback on the results of the project under the expert view of people who have experience in this domain and can evaluate, approve and enrich the ACCESSIBLE outcomes. Candidates will preferably be public bodies, representatives of software development organisations and SMEs, industrial organisations, accessibility consultants, developers, designers, testers, and other interest organisations and researchers. Also the participation of people with disabilities will be welcomed. Interested experts are kindly requested to fill in the online application form. <http://www.accessible-project.eu/index.php/open-call-for-experts.html>

ACCESSIBLE WORKSHOP AT ICCHP 2010

ACCESSIBLE project is also organizing its first **Workshop on “accessibility simulation technologies and standards issues”**, within the frame of the **12th ICCHP conference in Vienna**. The Workshop will be held on Tuesday 13 of July 2010, in the context of the ICCHP pre-conference in Vienna. The ICCHP, International Conference on Computers Helping People with Special Needs, 2010 wants to highlight the progress of the issue of Interfacing the existing and emerging Human-Computer Interface as well as achievements and plot a R&D-roadmap towards such challenges, which will ensure even higher product and service usability.

For more information visit: <http://www.icchp.org/>.



1st International Conference of AEGIS & 2nd Pan-European Workshop/User Forum

Access for All in the desktop, web and mobile field: an end-user and developer perspective

Seville, Spain, 6-9 October 2010



We would like to kindly invite you to the 2nd Pan - European Workshop/User Forum and the 1st International AEGIS Conference entitled "Access for All in the desktop, web and mobile field: an end-user and developer perspective" which will take place in Seville, Spain on 6 and 7-8 October 2010 respectively. For the dedicated developers, a free developer camp (clinic) will take place on the 9th of October 2010. All events are organised by the AEGIS IP initiative (Open Accessibility Everywhere: Groundwork, Infrastructure, Standards - www.aegis-project.eu), partially funded under FP7 (Theme: ICT-2007.7.1; ICT & Ageing).

With an estimated total population of 501 million (<http://epp.eurostat.ec.europa.eu>, 1 January 2010), an estimated 45 million people in Europe have a LSHPD (long-standing health problem or disability). A mere 20-30% are believed to use Assistive Technology (AT), but concrete figures do not exist. In fact, most people with disabilities are not even aware of what AT exists. This workshop and conference aims to help spread the word on the existence of AT, and especially on technology that is freely available.

The Workshop/User Forum aims to bring together end-users and experts in the field of assistive technologies, from both the OSS community as well as the proprietary one, that focus on the accessibility of desktop, web and mobile applications. During the workshop the project will present the tools developed so far, and will stimulate discussions between both end-users and application developers vis-à-vis the project's outcomes so far.



The outcomes will be taken into account by the Consortium during the further course of the project. Participation to the workshop will be free of charge.

The conference aims to gather presenters that address both the end-users as well as the developers' perspective in a number of areas (see topics below). Interactive demos of Assistive Technology ICT, in the Rich Internet Applications, Desktop Applications and Mobile Applications areas as well as developers' tools that embed accessibility plug-ins will also be demonstrated in a separate exhibition area. Also an exhibition space will be provided.

The registration form for each of the aforementioned events will be available shortly via the project's website (www.aegis-project.eu).

We kindly invite you and your colleagues to submit papers in the following categories:

- Scientific papers
- Technical papers

Conference topics (non-exhaustive list):

- Accessible desktop applications (AT, developer tools and accessible applications)
- Accessible mobile applications (AT, developer tools and accessible applications)
- Accessible Rich Internet Applications (AT, developer tools and accessible applications)
- Accessibility and Standardisation (e.g. ISO, eInclusion, Policies, Legislation)
- Accessibility and Usability (e.g. Design for All)
- Accessibility research (e.g. Assistive technology usage by end-users and their satisfaction, innovative AT training via accessible e-learning)

Important dates:

- Abstract submission: 28th May 2010
- Notification of abstracts acceptance: 14th June 2010
- Submission of external exhibitions by 30th June 2010
- Paper submission deadline: 9th July 2010
- Notification of acceptance and outcome of review process: 23rd July 2010
- Final camera ready papers: 31st August 2010
- Registration by 30th September 2010



AEGIS in the news

A Giant Leap and a Big Deal: Delivering on the Promise of Equal Access to Broadband for People with Disabilities

The FCC (Federal Communications Commission - USA) released "A Giant Leap and a Big Deal: Delivering on the Promise of Equal Access to Broadband for People with Disabilities". It is the second paper in a series of working papers that are being released in conjunction with the USA's National Broadband Plan, and it is the first time the Commission has issued a working paper addressing accessibility and technology issues. References are being made to EU backed initiatives such as the AEGIS project.

[http://download.broadband.gov/plan/fcc-omnibus-broadband-initiative-\(obi\)-working-report-giant-leap-big-deal-delivering-promise-of-equal-access-to-broadband-for-people-with-disabilities.pdf](http://download.broadband.gov/plan/fcc-omnibus-broadband-initiative-(obi)-working-report-giant-leap-big-deal-delivering-promise-of-equal-access-to-broadband-for-people-with-disabilities.pdf)

AEGIS paper wins the "Judges Award" at the "Web Accessibility Challenge" (sponsored by Microsoft)

An AEGIS paper recently presented in April 2010 at the 7th International Cross-Disciplinary Conference on Web Accessibility (W4A 2010) by CERTH/ITI has won the "Judges Award" at the "Web Accessibility Challenge" (sponsored by Microsoft). The paper entitled is "3D HapticWebBrowser: Towards Universal Web Navigation for the Visually Impaired - Judges Award at W4A 2010 Web Accessibility Challenge". Authors were: Kaklanis, N., Votis, K., Moustakas, K. & Tzovaras, D. It has been published in the Proceedings of the International Cross-Disciplinary Conference on Web Accessibility (W4A 2010), 26th & 27th April 2010, Raleigh, NC, USA.

In this paper the "3D HapticWebBrowser" which is an application that enables haptic navigation through the web for the visually impaired users, is presented. The application is based on an innovative interaction technique according to which each HTML component is being transformed into a 3D virtual object with haptic and audio feedback. The application also supports the haptic exploration of 2D maps found on the web.





Contact us

PROJECT COORDINATOR

Dr. Evangelos Bekiaris
Research Director
Centre for Research and Technol-
ogy Hellas

Hellenic Institute of Transport
6th km. Thermis-Charilaou Road
57001 Themi
Greece
Tel. +30-2310-498265
Fax: +30-2310-498269

Athens office:
Poseidonos Av. 17
17455 Alimos
Greece
Tel. +30-210-9853194
Fax: +30-210-9853193

E-mail: abek@certh.gr
<http://www.hit.certh.gr>

TECHNICAL MANAGER

Peter Korn
Accessibility Principal &
AEGIS Technical Manager

Oracle
500 Oracle Parkway
Redwood City, CA 94065
U.S.A.
Tel. +1-650-506-9522

E-mail: peter.korn@oracle.com
<http://blogs.sun.com/korn>

Subscribe to our newsletter

Requests to subscribe to or unsubscribe from this Newsletter should be directed to info@AEGIS-project.eu with the subject "**subscribe newsletter**" or "**unsubscribe newsletter**".

All issues of the Newsletter may also be downloaded at the project web-
site:

<http://www.AEGIS-project.eu/>