Including Users and External Contributors in an European Research Project

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EIAO

Overview

- Scope of the EIAO project.
- Participants.
- EIAO and Inclusion.
- Final remarks.

European Internet Accessibility Observatory

- Project spanning three years, from September 2004- 2007.
- Accessibility study of web sites, especially governmental and local authorities, and private service providers such as banks and public transport.
- Build the technical machinery for a possible Internet Accessibility Observatory.
- Develop new methods to assess web accessibility.

What is Internet Accessibility ?

- Facets of Accessibility:
  - Complying to standards set by W3C and similar standard bodies.
  - Accessibility for disabled groups of users (blindness or physical disabilities).
  - Accessible by variety of hardware/software platforms:
    - Thin/thick clients (Desktop, mobile, kiosk etc),
    - Computing platforms,
    - Browsers (Open/proprietary, text/GUI),
    - Tools (pdf/doc/html etc).
  - Accessibile from different geographical locations:
    - Languages supported, intended audience.
- Accessibility is crucial for digital inclusion and ideally all Web content should be evaluated.

Open standards improve accessibility and vendor neutrality

Thread standard
well defined

Open Standards for the web

HTTP, HTML, CSS, ...

All EU countries agreed to adopt and use WCAG.

Access for different needs

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Open Standards improve accessibility.

Scope of EIAO

- EIAO focuses on evaluating accessibility of Web content for people with disabilities using a set of Web Accessibility Metrics (WAMs):
  - Based on the checkpoints of the Web Content Accessibility Guidelines (WCAG) version 1.0 developed by the World Wide Web Consortium (W3C).
  - Possible conversion to version 2.0 when available.
- Examples of checkpoints:
  - Provide a text equivalent for every non-text element (e.g., via "alt", "longdesc", or in element content).
- Like WCAG, user interaction is outside the scope of EIAO.

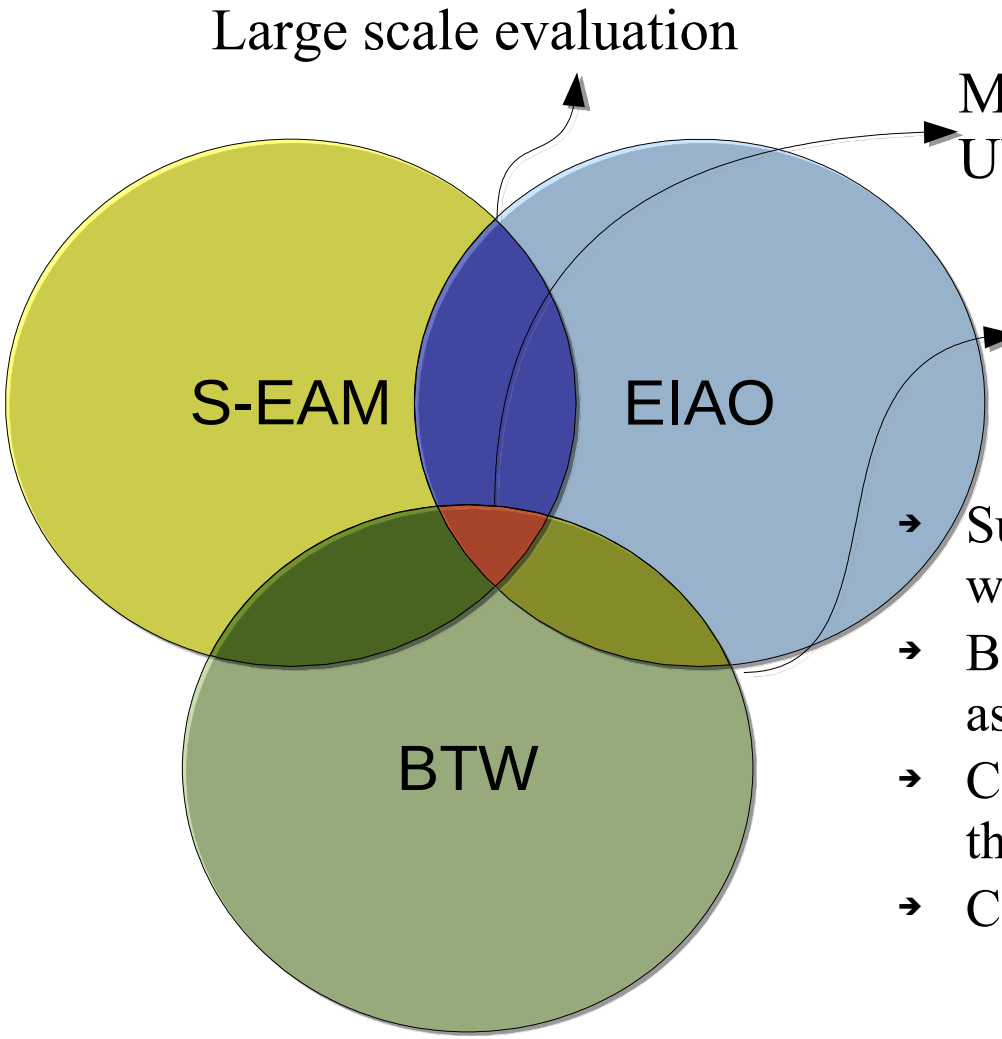
Partners and the invited contributors

Universities	Agder University College	NO
	University in Tromsø	NO
	Manchester Metropolitan University	UK
	Technical University of Warsaw	PL
	Aalborg University	DK
SMEs consultancy	Vista Utredning as	NO
	Nettkroken	NO
	Intermedium	NO
	FBL	IT
	FTB-Volmarstein	DE
Invited Contributors	Parastoo Mohagheghi – SW Engineering	NO
	Anand B Pillai – HarvestMan	IN

Reference groups and the WAB Cluster

Reference Groups	European Disability Forum EDF European Design for All e-Accessibility Network EDeAN Norwegian Post and Telecommunication Authority Norwegian Directorate for Health and Social Affairs National accessibility authorities will be invited (URL + Policy) NAC-NO established Statistics Norway - not yet formalised
Cluster	Projects BenToWeb and Support-EAM Develop Unified Web Evaluation Methodology (UWEM)

The EU Web Accessibility Benchmarking Cluster (WAB Cluster)

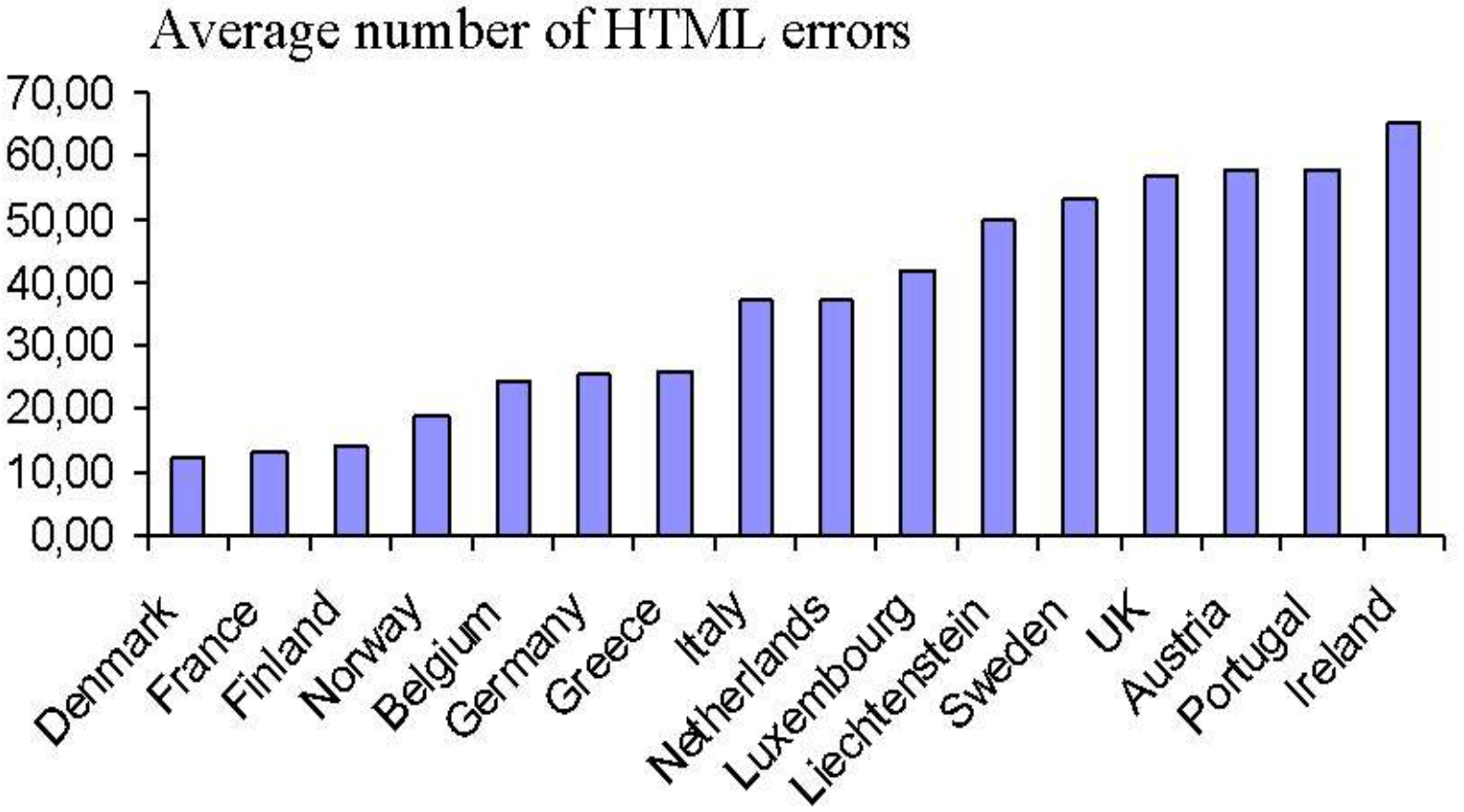


- Support-EAM: creating a quality mark for web accessibility assessments.
- BenToWeb: checkpoints that are difficult to assess automatically.
- Co-operation with 16 additional partners in the cluster.
- Co-ordination with W3C (WAI) ERT group.

EIAO in the WAB Cluster

- Preparation of a platform for a possible Observatory:
  - Measurement machine with modular tests.
  - Evaluation of 10,000 websites using an autonomous Internet robot- called ROBot for ACCessibility monitoring (ROBACC).
  - Data warehouse for collection of results.
  - Results management, aggregation and reporting.
- Facility for testing aspects of the WAB Cluster methodology.

Some early results from the prototype



Monitor public content

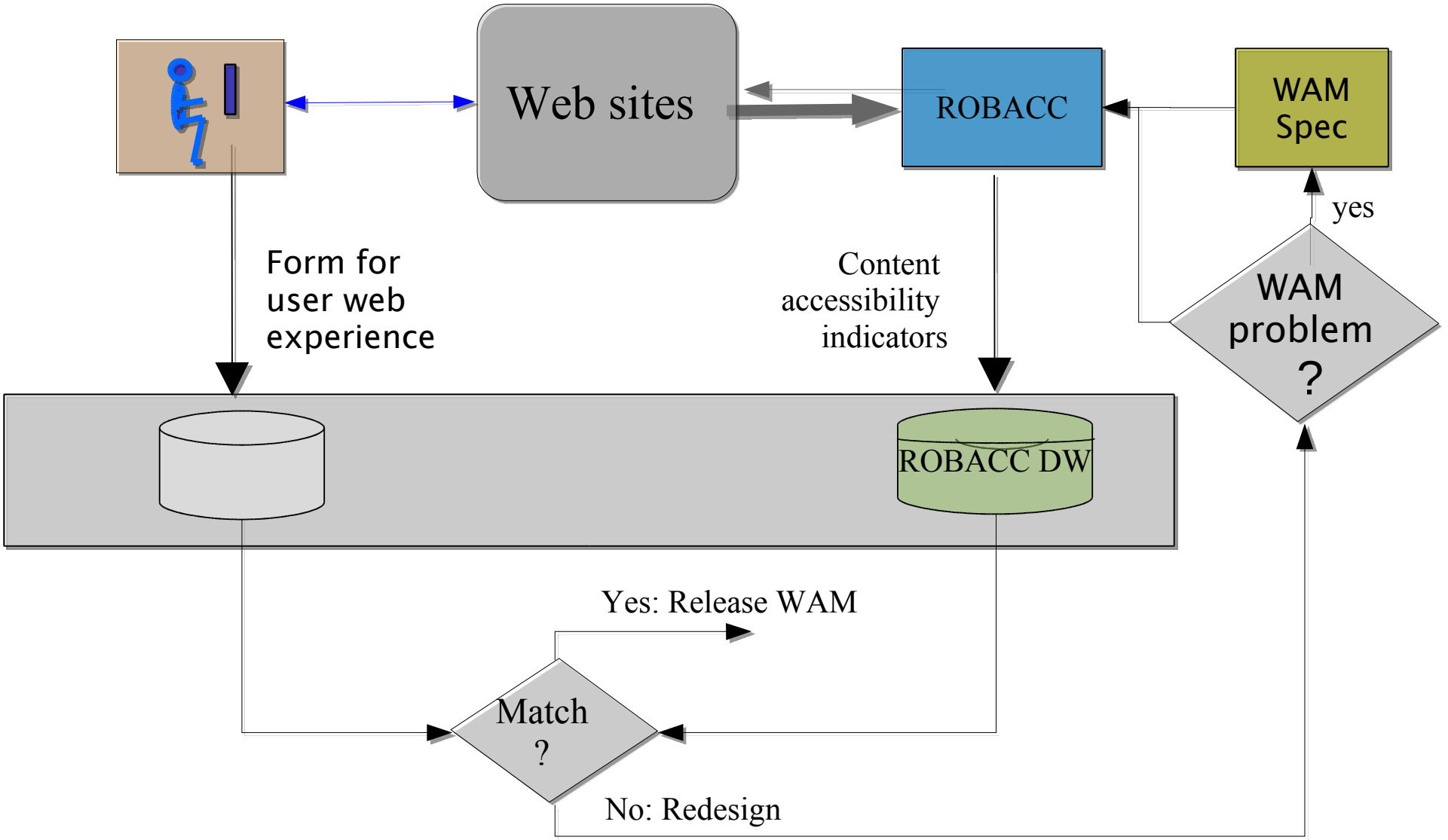
based on internationally adopted guidelines (WCAG)

Digital inclusion – from users' point of view

- Digital inclusion of disabled users:
  - Continuous evaluation of web content accessibility will help to increase awareness on accessibility problems among web content developers, web content managers and policy makers.
- Including users in developing accessibility metrics:
  - Reference Groups,
  - Interviews and surveys,
  - National accessibility Case (NAC) in Norway.

Digital inclusion – from users' point of view (cont.)

(User testing & ROBACC redesign)



Digital inclusion- from software developers' point of view

- Including external contributors (developers, researchers and students) in software development:
  - Open source tools for development and testing.
  - ROBACC uses an open source tool for crawling of websites called HarvestMan developed by Anand B Pillai, who agreed to adapt it for the EIAO project.
  - Producing open source software and documents based on the consortium agreement. Guidelines are written in project handbook, and possible exceptions are dealt with by the PCC.
  - Inviting other contributors – Parastoo Mohagheghi is invited to monitor and study the software engineering methodologies of EIAO.

Digital inclusion – from software developers' point of view (cont.)

- Distributed software development:
  - Project partners from six European countries and an invited contributor from India.
  - Project website for sharing documents and tracking project progress.
- Use of open source developer tools to encourage collaboration:
  - Open source version control system for source code.
  - Open source bug tracking system.

Digital inclusion – point of view of software integration

- Integration of different licenses:
  - Software primarily under the GNU General Public License (GPL), which encourages collaboration.
  - In some cases GNU Lesser Public License (LGPL) for public interfaces to allow integration with closed software components like commercial accessibility assessment tools.
- Integration with other accessibility tools using a plug-in interface.

Challenges

- Combining different IPR models.
- Coordination of activities in the cluster and with standards organizations.
- Immature concept of accessibility - Metrics are the input and outcome of the observatory prototype.
- Keeping developers and Reference Groups interested and involving others.

Conclusions

- Accessibility evaluation for inclusion:
  - Ranking of sites.
  - Monitoring of development over time.
  - Encouraging Web content developers (page authors and site designers) to think of accessibility.
  - Increased use of open standards and accessibility evaluation improves accessibility.
- Open source development:
  - Fully transparent methods and results.
  - Encourages participation.

Thank You !!!

Any questions ?