



Observatorio de Accesibilidad

Monitoring and reporting tool for the simplified method in Spain

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 Twitter: @obsae

What is the Spanish Administrative context?

State



18 departments

Regional governments



17 regional governments
2 autonomous cities

Local entities



8.116 local entities
41 county councils
11 island councils

RD 1112/2018, of 7th September,
on the accessibility of websites
and mobile applications in the
public sector (1*)

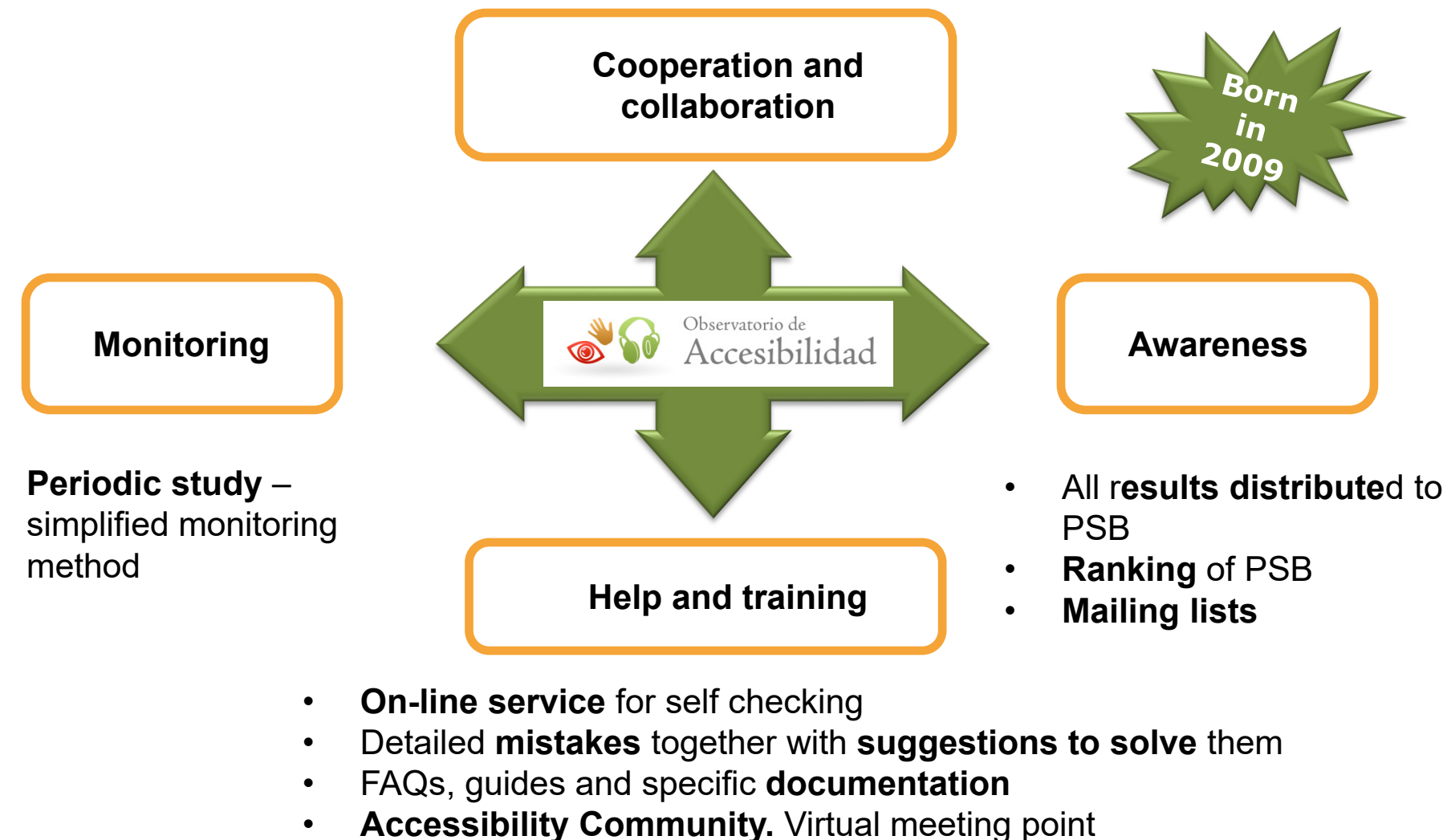


COMPLEXITY AND
COOPERATION



Some competencies
are specific of each authority
and others are shared

What is the Web Accessibility Observatory?



What is the OAW Tracker Tool?

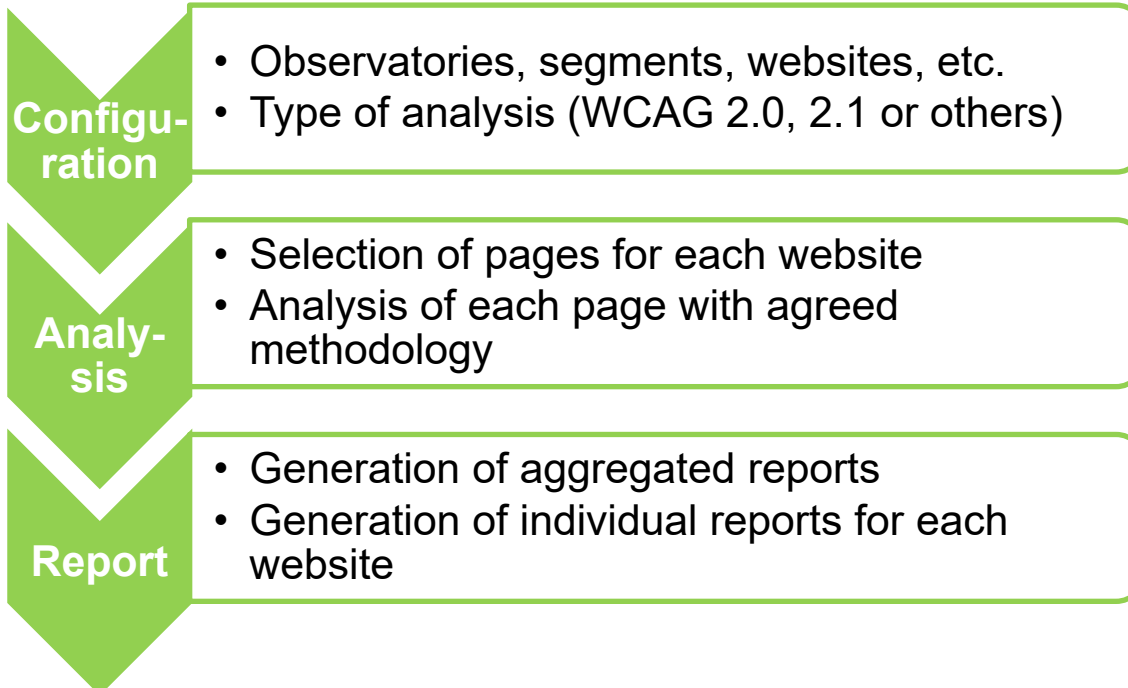
Open source tool to monitor compliance of accessibility requirements in Websites.
Compatible with simplified monitoring method Directive 2016/2102.

From December 2009

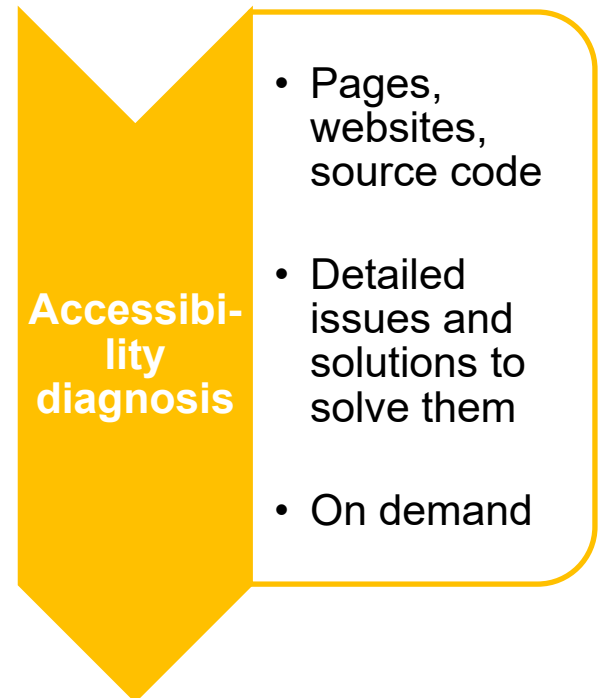
Released tool in
November 2018

✓ Offered services by the OAW Tracker Tool

Observatory Studies



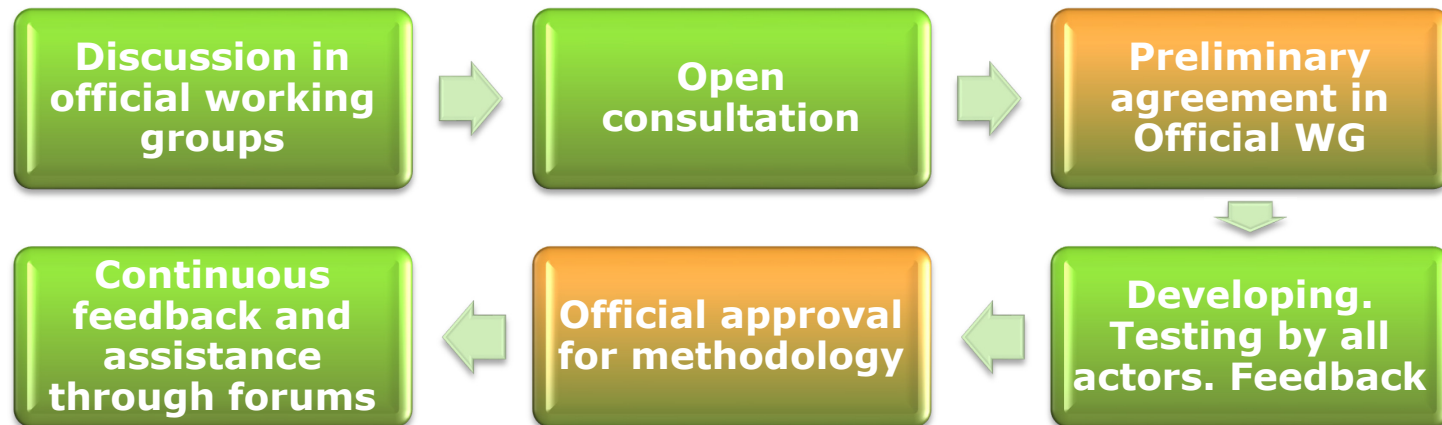
Online shared service



How are we implementing the Simplified Monitoring Method?

With a defined, approved and public methodology (1*) for all the entities that are being evaluated

- ✓ **Participation in the definition process.** working groups with Public Administrations and open consultation: public sector, private sector, and associations of persons with disabilities.
- ✓ **Previous testing to the report.** Before making the final approval of the methodology they could test it with our developed tools and with a preliminary observatory.
- ✓ **Review Commitment.** We are reviewing the methodology according to suggestions and examining the results.
- ✓ **Open channel for communications.** Thanks to the virtual community



What does our methodology look like?

Its main objective is to obtain and **estimation of the accessibility level of the websites** and detect incompliances.

EN 301 549: 2018 = UNE-EN 301 549:2019 (in Spanish)

- ✓ It is **not** and **accessibility audit**. Many warnings included in document.
- ✓ **Fully automatic**. selection of pages (although possibility of manual selection), all the tests and all the reports.
- ✓ **Selection of 20 verifications**. The most important ones and the ones where usually more problems are found. Some tests for each verification. **More than 110 checks** for each page.
- ✓ **Improved with specialized metrics** defined to estimate verifications usually performed manually.
- ✓ Evaluation of **each page** with a **score** and an **accessibility level**.
- ✓ Estimation for **each website**:
 - **Average Website Score**. from 0 to 10
 - **Estimated level of adequacy of a website**. (not valid, A, AA)
 - **Estimated compliance status**. (totally conformant, partially conformant, non conformant).

Which is the organization of the sample of websites?

✓ **Multiple possibilities.**

- **1 – N observatories.** Can be analysed independently.
- **1 – N segments in an observatory.** Comparisons inside each segment.
- **1 – N seeds in a segment.** A website with all the qualifying parameters.
- **“Grouped by”** property for each seed. To organize distribution of results.

In the case of Spain

- ✓ **1000 – 1500** websites. (ID 2018/1524 – Annex I - 2.1). Distributed in 4 observatories
- ✓ **Configurable tags:** level of government, geographic distribution, thematic, chosen by disabled people, any other tag...(ID 2018/1524 – Annex I - 2.2)
- ✓ **Recurrence** (ID 2018/1524 – Annex I - 2.4)
 - **Around 50%. Fixed**
 - **More than 50%. Changes every monitoring period.**
 - **Cycles of two years.**
 - **Year odd.** 2020-2021 will be considered odd.
 - **Year even..**
- ✓ **Complexity** (ID 2018/1524 – Annex I - 3.4)
 - **Low, Medium, high**
- ✓ **Participation of Associations for disabled people** (ID 2018/1524 – Annex I - 2.2.4)

Observatory State

Main websites

Main electronic services

Organisms websites

Institutional Public Sector

Tematic websites

Electronic Services

Observatory Regions

Main websites

Ofical Gazette

Electronic Services

Education

Employment

Health

Taxes Etc.

Observatory Local

Main cities (capitals)

County or island councils

Cities > 20.000hab

Mid sized towns

Medium villages

Other services

Observatory others

Constitutional bodies or independent

Justice

Universities



Observatorio de Accesibilidad

Demo of the OAW Tracker Tool

List of Observatories



[Log Out](#)

Observatories

Observatories

Segments

Seeds

Dependencies

Complexities

Labels

Templates

Diagnostic service

Diagnostic service

Statistics

Other options

Observatories

List of Observatories

[+ New Observatory](#)

OBSERVATORY	ACTIVE	TYPE	SCOPE	TAGS	CARTRIDGE	ACTIONS	REMOVE
TMP	No	AGE	-		UNE-2012		
Demo Sweden	Si ½	AGE	AGE	Fixed	UNE-EN301549:2019 (beta		
NOBAN-WCAG20	No	AGE	-		UNE-2012-B		
Observatorio AGE - UNE-EN 301549 (BETA)	No	AGE	-		UNE-2012-B		
Observatorio EELL - UNE-EN 301549 (BETA)	No	AGE	-		UNE-2012-B		
Observatorio CCAA - UNE-EN 301549 (BETA)	No	AGE	AGE		UNE-EN301549:2019 (beta		
Observatorio OTROS - UNE-EN 301549 (BETA)	No	AGE	AGE	Fixed Even	UNE-EN301549:2019 (beta		
TEST_ENTORNO	No	AGE	AGE		UNE-EN301549:2019 (beta		

Create a new observatory

New Observatory

The fields marked with * are required to be completed.

* Name:	<input type="text"/>
* Type:	AGE <input type="button" value="v"/>
Scope:	- <input type="button" value="v"/>
* Active:	No <input type="button" value="v"/>
* Cartridge:	UNE-2004 List of verifications
Associated Segment:	6 - Test - Resto de sedes Segmento I: Principales Segmento II: Organismos Segmento III: Temáticos Segmento IV: Otros Segmento V: Códigos Assign segments
Language:	Spanish <input type="button" value="v"/>
* Periodicity:	Diario <input type="button" value="v"/>
* Depth:	1 Default Depth and Breadth for complexity
<small>(For seeds that do not have Complexity assigned)</small>	
* Amplitude:	1 <input type="button" value="v"/>
<small>(For seeds that do not have Complexity assigned)</small>	
* Pseudo-random:	<input type="checkbox"/>

Launch date details

* Start date: (dd/mm/yyyy)

* Time: * Minute:

Labels:

To add/Remove seeds

Feeds: on a large scale or individually

Observatory seed management

Search

Seed name:

Segment:

- 1 - Test - Principales
- 2 - Test - Organismos
- 3 - Test - Sector Público Institucional

Scope:

- AGE
- CCAA
- EELL

Depend on:

- A Coruña
- Álava
- Albacete

Complexity:

- Low
- Medium
- High

URL:

directory:

Active:

Removed:

Labels:

Only one URL (rest of pages automatic selection) or
A list of URLs manually selected

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<lista>
  <semilla>
    <id>2925</id>
    <nombre>Helsinki municipality</nombre>
    <segmento>Local</segmento>
    <activa>>true</activa>
    <url>https://www.hel.fi/helsinki/fi</url>
    <acronimo/>
    <depende_de>Finland</depende_de>
    <en_directorio>>false</en_directorio>
    <ambito/>
    <complejidad>media</complejidad>
    <etiquetas/>
  </semilla>
  <semilla>
    <id>2923</id>
    <nombre>Aarhus Kommune</nombre>
    <segmento>Local</segmento>
    <activa>>true</activa>
    <url>https://www.aarhus.dk/</url>
    <acronimo/>
    <depende_de>Denmark</depende_de>
    <en_directorio>>false</en_directorio>
    <ambito/>
    <complejidad>media</complejidad>
    <etiquetas/>
  </semilla>
</lista>
```

Load seeds from a xml file

Search

Clean

List of Labels or Tags

Label Management of the Observatory

+ New Label

NAME	CLASSIFICATION	REMOVE
<input type="text" value="Estatal"/>	<input type="text" value="Distribución"/> ▾	✘
Madrid	Distribución	✘
Discapacidad	Otros	✘
Pruebas	Otros	✘
Even	Recurrencia	✘
Fijo	Recurrencia	✘
Fixed	Recurrencia	✘
Odd	Recurrencia	✘
Empleo y fiscalidad	Temática	✘
Protección del medio ambiente	Temática	✘
Protección social	Temática	✘
Sanidad	Temática	✘

List of Complexities


Management of Complexities of the Observatory

[+ New complexity](#)

NAME	DEPTH	WIDTH	REMC
Low	1	1	×
Medi...	4	8	×
High	5	10	×

State of observatory (in execution)

Execution status

STATUS	ACTIONS
Launched	

Summary of the implementation of the observatory

SEED TOTAL	TOTAL NUMBER OF SEEDS PROCESSED	TOTAL NUMBER OF SEEDS PROCESSED WITH RESULTS	TOTAL TIME	AVERAGE TIME	ESTIMATED COMPLETION TIME
6	4 (66,67% completed)	4 (66,67% completed)	1 minutes (0 hours)	0 minutes	0 minutes (0 hours)

Analysis in progress/last analysis


SEED
Test - PFunciona (https://sede.funciona.gob.es)

TOTAL URLS COLLECTED	TOTAL URLS ANALYZED	LAST URL ANALYZED	END OF LAST ANALYZED URL	AVERAGE TIME	TOTAL TIME	ESTIMATED COMPLETION TIME
1	0 (0% completed)	https://sede.funciona.gob.es		0.0 seconds	0.0 seconds	0.0 seconds

Portals not yet analyzed

#	NAME	URL
1	Test - REC 2	https://rec.redsara.es

Portals with no results

#	NAME	URL	RELAUNCH
1	Test - PFunciona	https://sede.funciona.gob.es	

Observatory Executions

































Different executions of an observatory

🏠 Observatories / Executions

Aggregated Report

Download all Individual Reports in PDF

Executions List

IMPLEMENTATION DATE	ASSOCIATED CARTRIDGE	STATE	INDIVIDUAL RESULTS	AGGREGATED REPORT	INDIVIDUAL REPORTING	AGGREGATED GRAPHS	ANNEXES	DELETE
17/04/2020 10:05	UNE-EN301549:2019 (beta)	Finished 			 			
17/04/2020 09:45	UNE-EN301549:2019 (beta)	Finished 			 			
17/04/2020 09:40	UNE-EN301549:2019 (beta)	Finished 			 			
17/04/2020 09:20	UNE-EN301549:2019 (beta)	Finished 			 			

Execution Date

Individual Results

Aggregated Charts

Export results in xml format

Observatory Executions

Individual Results of an observatory execution

Observatory results

Search

Seed name

URL

Search

Clean

+ Add seed

Regenerate scores

Free up space

Average Score
of the website
(from 0 to 10)

Conformance Level
of the website
(No valid, A, AA)

NAME	COMPLE	SCORE	ACCESSI	ANALYZI	RESULT	REPORT	RELAUN	REMOVE
Test - PAe		Low	51	1	51			
Test - PAG		Low	31	1	31			
Test - REC		Low	51	1	51			
Test - PFunciona		Low	46	1	46			
Test - Sede PAG		Low	51	1	51			

Results for each
individual page

Download Individual
Report

Relaunch
analysis

Engine for generation of aggregated report

Configurar informe agregado

Título del informe

Título del documento generado

Información : El filtrado de etiquetas se aplica como una consulta inclusiva.
Por ejemplo, si se indican las etiquetas *ETIQUETA_1* y *ETIQUETA_2* se seleccionarán los resultados de las semillas que tengan asociada la *ETIQUETA_1* o la *ETIQUETA_2* (o ambas)

Filtrar por etiquetas

Etiquetas

Información : El filtrado de etiquetas se aplica como una consulta inclusiva.
Por ejemplo, si se indican las etiquetas *ETIQUETA_1* y *ETIQUETA_2* se seleccionarán los resultados de las semillas que tengan asociada la *ETIQUETA_1* o la *ETIQUETA_2* (o ambas)

Observatorios para incluir en el evolutivo

- 30/01/2020 16:55 (Actual)
- 23/01/2020 12:20

Gráficas opcionales a incluir

Seleccione las gráficas opcionales a incluir en el observatorio

- Incluir gráfico global de modalidad por verificación
- Incluir gráfico global de aspectos
- Incluir gráfico segmentos de modalidad por verificación
- Incluir gráfico segmentos puntuación media por verificación
- Incluir gráfico segmentos de aspectos
- Incluir gráfico evolutivo de cumplimiento por verificación
- Incluir gráfico evolutivo de aspectos

Plantillas a usar para generar el informe

* Plantilla base

* Plantilla de la sección de segmentos

Información : Para que esta plantilla funcione, la plantilla base seleccionada tiene que tener **obligatoriamente un marcador llamado *categorysection*** en la posición del documento donde se quiera añadir esta sección. En caso contrario no podrá ser insertado en el documento base.
[Insertar un marcador en LibreOffice](#)

* Plantilla de la sección de complejidades

Información : Para que esta plantilla funcione, la plantilla base seleccionada tiene que tener **obligatoriamente un marcador llamado *complexitysection*** en la posición del documento donde se quiera añadir esta sección. En caso contrario no podrá ser insertado en el documento base.
[Insertar un marcador en LibreOffice](#)

Enviar

Reports - What do the reports look like?

✓ Aggregated report (PDF)

- A different report for each observatory (in Spain one for each level of public administrations analyzed (state, regional, local, others))
- **Totally anonymous.** To get an overview of the situation, but not indicate who is doing it wrong.
- **Evolution** in the different iterations and **comparisons.**
- **Abstract and conclusions made manually by an expert.**

✓ Internal information for the monitoring organism

- **XML files** with full results.
 - Sumup of results in websites
 - Sumup of results in every page
- **Using excel** we create: graphs and document with **aggregated information for our collaborating partners.** One for each Ministry and Regional Government.

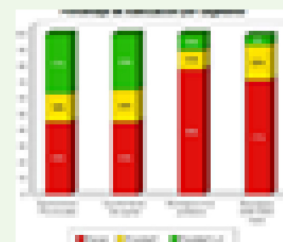
Aggregated Report

GLOBAL RESULTS

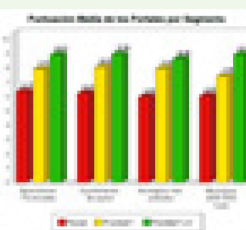
Conformance Level of websites



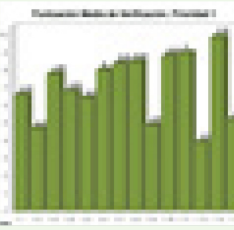
Conformance Level of websites/segment (N° websites)



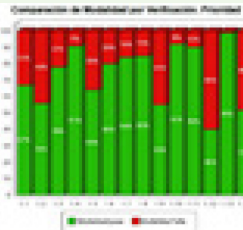
Average Score of websites/segment



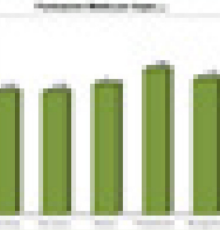
Average Score per Verification



Modality of Verification

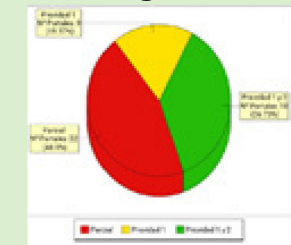


Average Score per Aspect

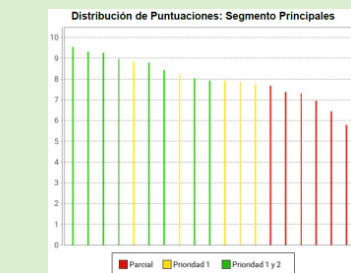


RESULTS BY SEGMENTS

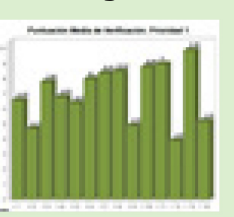
Conformance Level of websites in a segment



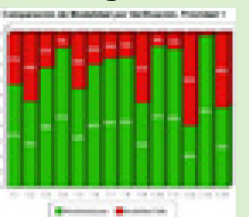
Average Score of websites in a segment



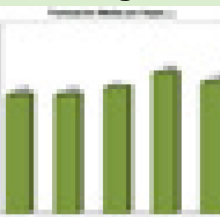
Average Score per Verification in a segment



Modality of Verification in a segment



Average Score per Aspect in a segment

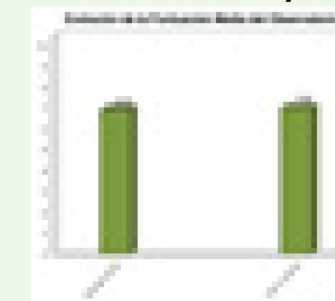


RESULTS EVOLUITION

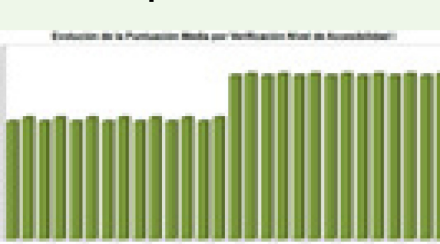
Conformance Level Evolution of websites



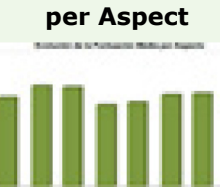
Average Score Evolution of an Observatory



Average Score Evolution per Verification

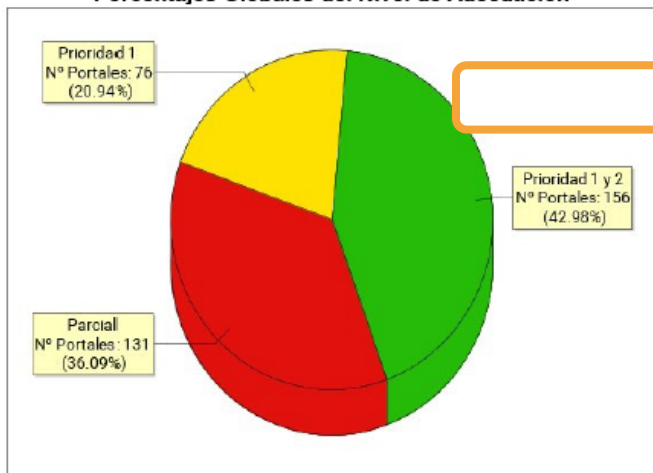


Average Score Evolution per Aspect



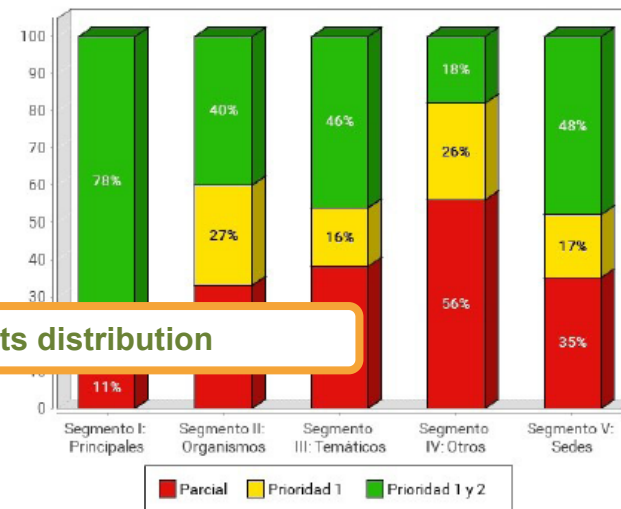
Aggregated Report

Porcentajes Globales del Nivel de Adecuación



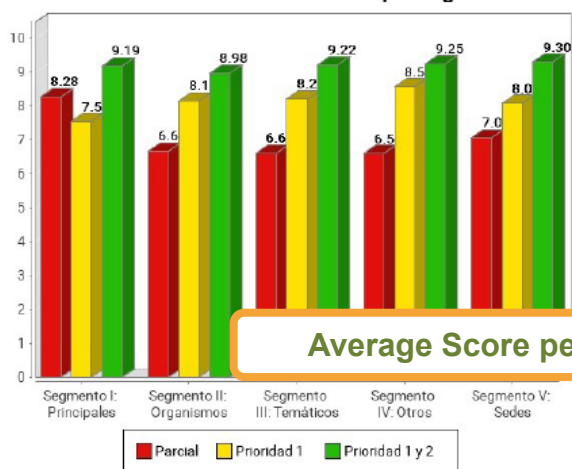
Global

Porcentaje de Adecuación por Segmento



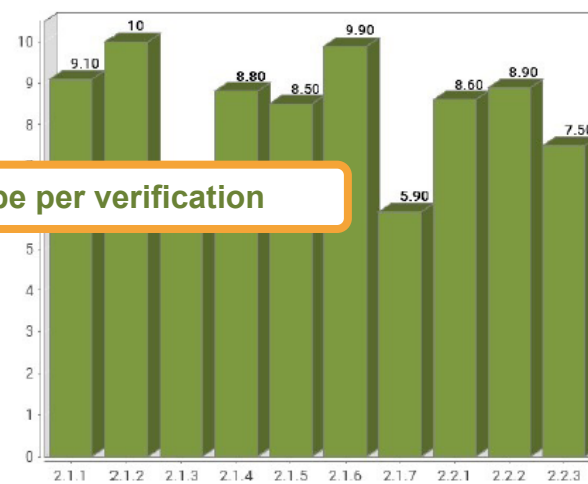
Segments distribution

Puntuación Media de los Portales por Segmento



Average Score per segment

Puntuación Media de Verificación. Nivel de Análisis II



Average scope per verification

Reports - What do the reports look like?

✓ Individual report

- A **specific report for each website** analysed.
- **Ranking** in the observatory and in each segment
- General Information about the **issues found**.
- Grouped by the field “dependent of”
- Included the report for each website and the source code analysed

✓ Reports on demand in the “online service for diagnosis”

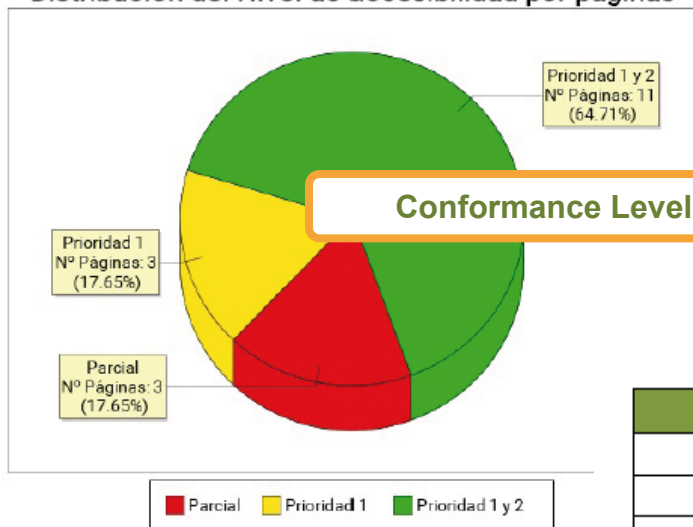
- Similar to the individual report they would get in an “official wave of analysis”
- **Detailed** Information about the **issues found**.
 - Included the line or piece of code with the issue.
- Suggestions and **recommendations to solve** the issues.

Individual Report

	Resultado 20/12/2016	Resultado 26/08/2016	Evolución
Nivel de Adecuación	Prioridad 1 y 2	No Válido	📈 mejora
Puntuación Media del Portal	9.61	6.08	📈 3.53
Posición a nivel global	7 (de 199 portales)	144 (de 198 portales)	📈 137
Posición en Diputaciones Provinciales	2 (de 48 portales)	36 (de 47 portales)	📈 34

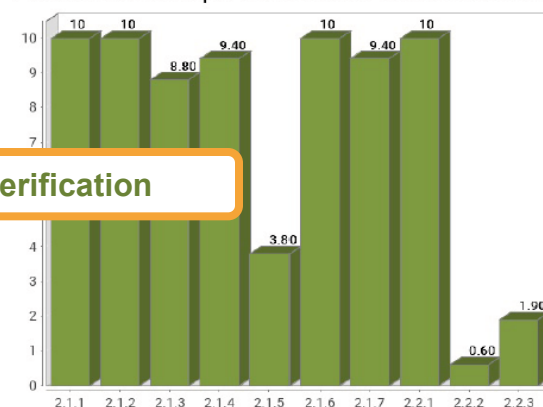
Evolution of results and ranking in the study

Distribución del Nivel de accesibilidad por páginas



Average score per verification

Puntuación Media por Verificación. Nivel de Análisis II



Sum up per pages

Página	2.1.1	2.1.2	2.1.3	2.1.4	2.1.5	2.1.6	2.1.7	2.2.1	2.2.2	2.2.3
<i>Página 1</i>	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	0 F
<i>Página 2</i>	1 P	1 P	0 F	1 P	0 F	1 P	1 P	1 P	0 F	0 F
<i>Página 3</i>	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	0 F	1 P
<i>Página 4</i>	1 P	1 P	1 P	1 P	0 F	1 P	1 P	1 P	0 F	0 P
<i>Página 5</i>	1 P	1 P	1 P	1 P	0 F	1 P	1 P	1 P	0 F	0 P

Access to the online service from the Accessibility Community

Comunidad accesibilidad

General Documentación Colaboración **Servicio**

El servicio de diagnóstico en línea del Observatorio de Accesibilidad Web le remitirá en **diferido** al correo electrónico indicado, el informe solicitado junto con el código fuente analizado. Las peticiones serán encoladas y procesadas progresivamente.

Puede realizar el análisis de un sitio web accesible desde Internet, o del código fuente de una página interna a la que el analizador no pueda acceder, como por ejemplo: una Intranet, una página que requiera autenticación previa mediante certificado electrónico, una página en desarrollo,...

Si tiene cualquier problema con el servicio, por favor, envíe un correo electrónico al [Observatorio de Accesibilidad Web](#) .

Destinatario

Correo electrónico:

david.lubian@correo.gob.es

Mail to send results

Seleccionar el tipo de análisis

Sitio Web

Analiza un sitio web a partir de una URL o página/s de un sitio web público en Internet inicial.

Conjunto de URLs

Analiza un conjunto cerrado de URLs. Análisis online de un conjunto predefinido de páginas de un sitio web público en Internet.

Código fuente

Analiza el código fuente introducido. Análisis del código fuente de una página (p. ej. página de una Intranet a la que el analizador no pueda acceder).

Select analysis mode:

- Website to analyze
- Set of URLs to analyze
- Source code to analyze

Análisis de sitio web

URL del portal o página a analizar:

Opciones de rastreo

Cantidad de páginas:

Única

Complexity

Si desea que la selección aleatoria de páginas se realice dentro del último "directorio" (hasta la última "/" indicado en la URL (por ejemplo <http://www.dominio.com/directorio/pagina>), marque la siguiente opción.

No rastrear fuera del directorio

Tipo de informe

El servicio generará un informe con el detalle de todos los problemas según la siguiente metodología del Observatorio de Accesibilidad:

- Seguimiento simplificado Directiva (BETA). Informe conforme al borrador de la [metodología para el seguimiento simplificado, basada en la UNE-EN 301 549:2019](#) .
- Observatorio UNE 2012 (versión 2). Informe conforme a la [metodología del Observatorio de Accesibilidad, basada en la UNE 139 803:2012 \(versión aprobada en abril de 2018\)](#) .

Otras opciones de configuración:

- Sin comprobación de enlaces rotos** Acelera la ejecución del servicio de diagnóstico al no verificar todos los enlaces existentes en la página analizada.

Solicitar informe



Observatorio de Accesibilidad

Reuse and Translation

Reuse of the open source software

✓ Outside Spain

- Government of Argentina and Government of Costa Rica.
- Finalist and certificate of excellence in the **sharing and reuse awards 2019** of the European Commission.
- It's being evaluated by the **Nordic countries**.

✓ Inside Spain

- Not needed since we provide the on-line service.
- Some institutions are considering installing it for internal purposes:
 - Validation of all the pages.
 - Internal websites and development environments.
 - Connection from authoring tools.

<http://administracionelectronica.gob.es/ctt/oaw/abstract>
<http://administracionelectronica.gob.es/ctt/oaw/descargas>
<https://github.com/ctt-gob-es/oaw>



OAW Tracker Source Code

Documentation
Includes instructions for files needing translation

English Translation

Javascript Engine (optional)
(independent and secured execution of javascript of external websites)

Rastreador OAW WCAG 2.1

Versión 5.0.4 OAW - Código fuente

Código fuente del OAW (versión 5.0.4). Para poder analizar todo el código HTML, es decir, también el generado a través de JavaScript deberá desplegar también el motor JavaScript (versión 1.5.3).

NUEVO

↓ [Liberacion codigo OAW - MAETD v5.0.4 \(100787 KB - ZIP\)](#) 

Fecha de modificación: 22/05/2020

Versión 5.0.4 OAW - Documentación

Código fuente del OAW (versión 5.0.4). Para poder analizar todo el código HTML, es decir, también el generado a través de JavaScript deberá desplegar también el motor JavaScript (versión 1.5.3).

NUEVO

↓ [Documentacion Rastreador OAW WCAG2.1 v5.0.4 \(21381 KB - ZIP\)](#) 

Fecha de modificación: 22/05/2020

Translation files (English)

It contains most of the files necessary for the English translation of the OAW. The translation has been done using automatic translation tools.

NUEVO

↓ [English Traslator \(3884 KB - ZIP\)](#) 

Fecha de modificación: 22/05/2020

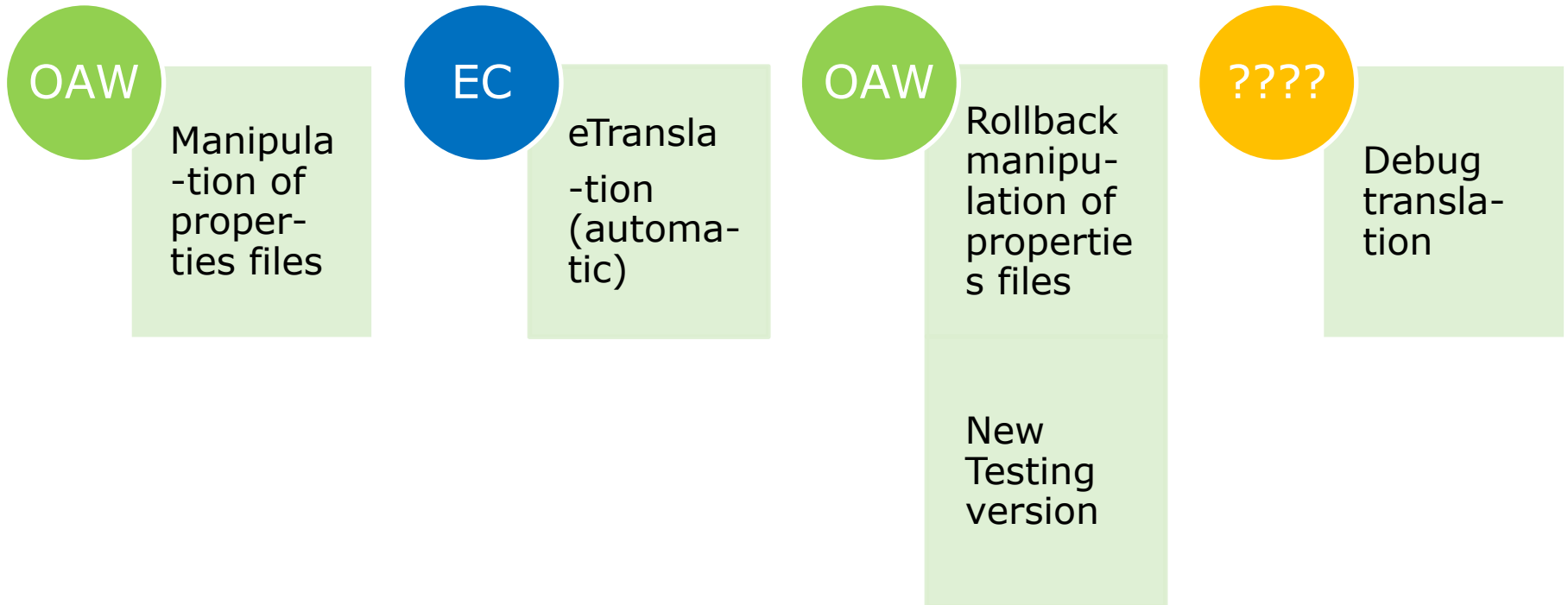
Versión 1.5.3 motor JavaScript - Código fuente

Código fuente del motor JavaScript (versión 1.5.3) necesario para el análisis del código HTML generado a través de dicho lenguaje.

Situation

First tested English version

- ✓ Everything configurable through properties files
- ✓ Needed collaboration from other entities





Observatorio de Accesibilidad

Conclusions

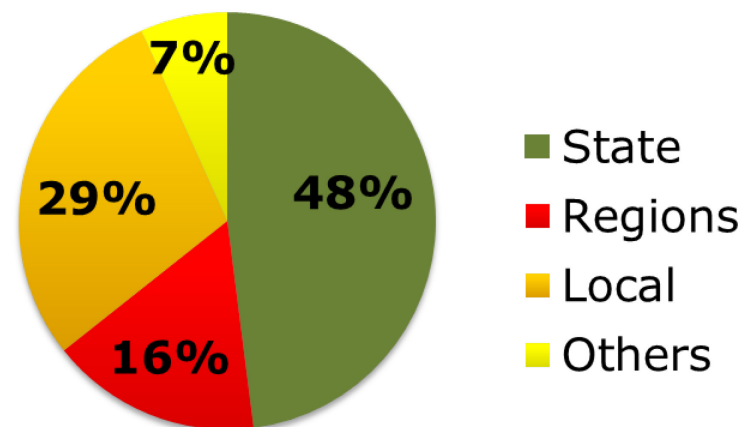
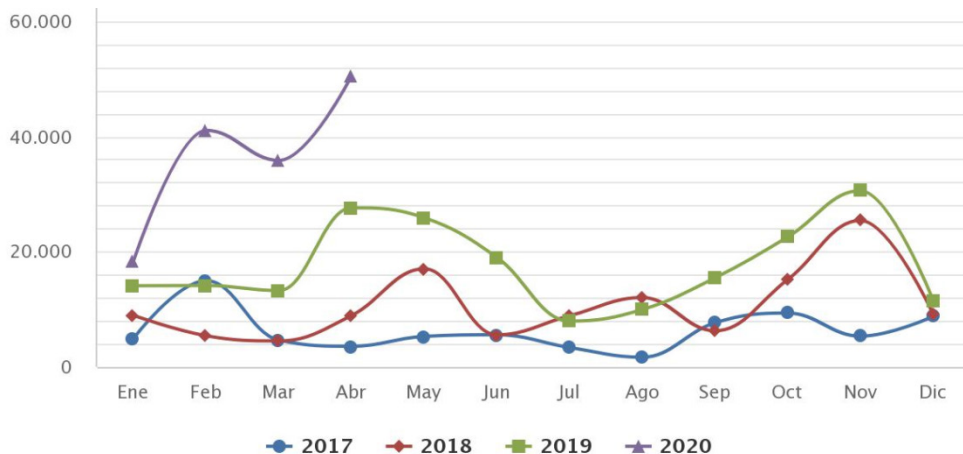
Shared online service

212.000 pages analyzed
in online service

In 2019

1000 users from different
Spanish institutions

Pages analyzed per month



Official studies of the observatory

- ✓ Around **300 websites** in each study
- ✓ **33 pages** per website
- ✓ **52.000 pages** analyzed in official reports in 2019
- ✓ **47 full studies** done with this tool.
- ✓ **5 different methodologies** implemented.



Supports the directive requirements

Flexible organization of the sample without development

Ready to be used

Ready for translation but needed collaboration

Opensource. Possible collaborative development.



Observatorio de Accesibilidad

Final questions

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