

PxWeb WCAG 2.0

PXWEB WEBMEETING 2021, KRISTIN GLOMSÅS



Statistisk sentralbyrå
Statistics Norway

Agenda

- PxWeb, following the rules to WCAG 2.0
- Usertest
- Experience
- Demo

Web Content Accessibility Guidelines (WCAG)



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PxWeb in Statistic Norway

- PxWeb – userinterface of Statbank Norway
- External PxWeb was launched 9. January 2018
- Started the planning of WCAG 2.0 in PxWeb 2019
- Launched the last part of the WCAG work in PxWeb April 2021



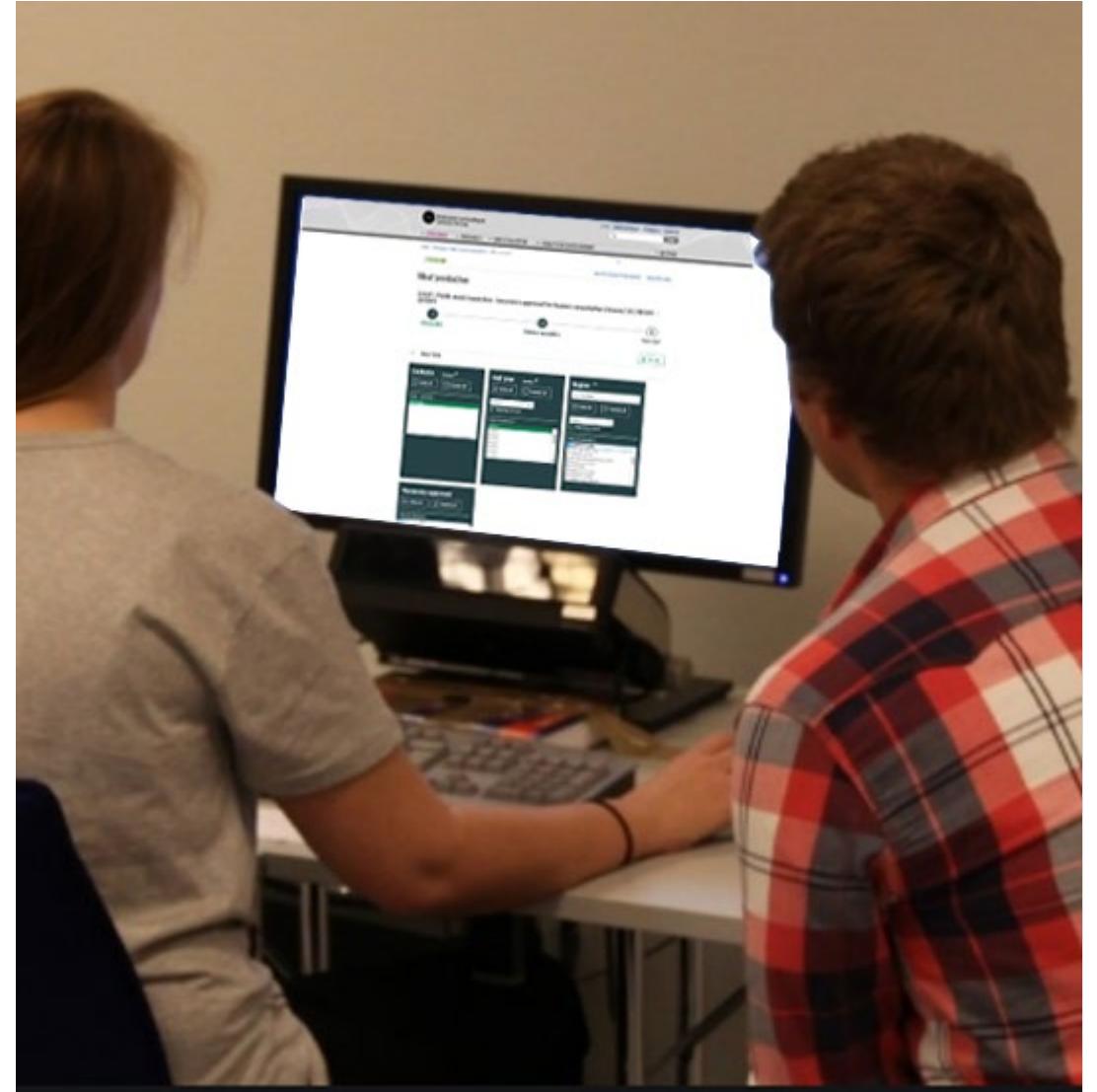
Importen areas in WCAG 2.0

- Pictures and graphics
- Use of colors
- Error handling
- Navigation
- Code standard and validation
- Contrast
- Links
- Mobile solutions
- Language in the code
- Text and structure
- Design and presentation



Working-process

- Made an insight-report
- User-tested the changes in PxWeb
- Feedback through Siteimprove
- Prototype of PxWeb
- Discussing the solution with SCB
- Final usertest of PxWeb2021 v1



Supported browser and mobile phone

- Browser
 - Chrome
 - Firefox
 - Safari
- Mobile phone
 - Iphone
 - Samsung



Tools for testing accessibility

- Wave - chrome extension
- Browser Stack – Test different mobile phone
- Siteimprove
- What a font - chrome extension
- NVDA – Screen reader



Changes in PxWeb

Improvment on footnotes

Choose variables

Period Mandatory *

☒ Select all ☐ Deselect all

Selected 1 of total 1

2003

Sex

☒ Select all ☐ Deselect all

Selected 0 of total 2

☒ Optional variable

men
women

Show tableNumber of selected data cells are: 1
(maximum number allowed is 100,000)
Presentation on screen is limited to 1,000 rows and 30 columns

Obs:

Type

Inmigrated

Migration cannot be added with regard to regions. When, for instance, municipalities are added to metropolitan areas, migration to the region is added to migrations within the region.

With calculating of age-specific rates per 1 000 of the mean population you shall use the mean population per year of birth. And some more

Outmigrated

Migration cannot be added with regard to regions. When, for instance, municipalities are added to metropolitan areas, migration from the region is added to migrations within the region.

With calculating of age-specific rates per 1 000 of the mean population you shall use the mean population per year of birth. And some more

Footnotes

Result

About table

Show result as...

Edit and Calculate

Save result as...

Save your query

Hide empty rows

Pivot manual

Pivot clockwise

Pivot counterclockwise

Fullscreen

	2003
	Inmigrated
20	1,394
21	1,561
22	1,803

Obs:

Type

Inmigrated

Migration cannot be added with regard to regions. When, for instance, municipalities are added to metropolitan areas, migration to the region is added to migrations within the region.

With calculating of age-specific rates per 1 000 of the mean population you shall use the mean population per year of birth. And some more

Footnotes

API query for this table

To the Top



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New Table-menu



PxWeb 2021 v1

[Svenska](#)

[/ Example](#)

Example



Choose table



Choose variable



Show result

Search in Example:

Search

⊕ AggregallowedNo

⊕ aggregations

⊕ AttributesCellnotes

⊖ Autopen

Population by region, period and sex 📊 🗲 📄

Population by region, period and sex 📊 🗲 📄

⊕ Descriptiondefault

⊕ Doublecolumn

⊕ error



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Resultpage

- Grouping all tools in a menu on left side
- Pivot-buttons
- Fullscreen-button
- Marking the cursorline in the table

 PxWeb 2021 v1 Svenska

[/ Example / Quarter / Volume of imports of goods, base year 2000=100, index by Commodity group SITC and period](#)

Choose table

Choose variable

Show result

Volume of imports of goods, base year 2000=100, index by period and Commodity group SITC

Result

▼ About table

▼ Show result as...

▼ Edit and Calculate

▼ Save result as...

▼ Save your query

▼ Hide empty rows

Pivot manual

Pivot clockwise

Pivot counterclockwise

Fullscreen

	0+1 Food, beverages and tobacco	0-9 Total	2+4 Crude materials, except fuels	3 Mineral fuels, lubricants and related materials	5 Chemicals and related products, n.e.s.	5-9 Processed goods	6 Manufactured goods classified by material	7 Machinery and transport equipment	8+9 Other manufactured articles
2006K1	146	121	101	99	127	124	117	125	125
2006K2	157	124	107	100	131	126	117	133	112
2006K3	154	120	103	105	126	120	106	125	123
2006K4	173	140	105	103	134	145	124	160	135
2007K1	161	137	118	101	142	142	133	148	134
2007K2	172	136	115	85	144	143	129	156	119
2007K3	170	135	111	107	136	137	121	146	136
2007K4	182	148	107	103	142	155	130	175	140
2008K1	172	143	106	104	151	149	128	160	142
2008K2	187	150	119	104	156	156	137	172	132
2008K3	177	136	111	105	142	138	116	147	137
2008K4	191	136	113	115	141	135	113	144	132
2009K1	176	117	99	105	138	113	91	112	124

Footnotes

API query for this table



Usertest

Result of the latest usertest of PxWeb

Statistic Norway usertested the
whole PxWeb WCAG-functionality
in may 2021



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Ustertest: mandatory and optional variables

! Select at least one value from these variables:

- age
- sex

Type Mandatory*

Selected 1 of total 2

Inmigrated
Outmigrated

Region

☒ Select all ☐ Deselect all

Selected 0 of total 4

☐ Optional variable
00 Sweden
01 Stockholm county
0114 Upplands Väsby
0115 Vallentuna

Age Mandatory*

☒ Select all ☐ Deselect all

Selected 0 of total 3

20
21
22

Select at least one value

Period Mandatory*

☒ Select all ☐ Deselect all

Selected 1 of total 1

2003

Sex Mandatory*

☒ Select all ☐ Deselect all

Selected 0 of total 2

men
women

Select at least one value

[Show table](#)



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Ustertest: Different view of page

Population

07459: Population, by sex and one-year age groups (M) 1986 - 2020

Choose table Choose variables Show result Expert view

▼ About table

Contents Mandatory *

☒ Select all ☐ Deselect all

Total 1 Selected 1

Persons

Year Mandatory *

☒ Select all ☐ Deselect all

Search ☒ Beginning of word

Total 35 Selected 1

2020

2019

2018

2017

2016

2015

2014

2013

Population

07459: Population, by sex and one-year age groups (M) 1986 - 2020

Choose table Choose variables Show result List view

▼ About table

Contents Mandatory *

☒ Select all ☐ Deselect all

Total 1 Selected 1

Persons

Year Mandatory *

☒ Select all ☐ Deselect all

Search

☒ Beginning of word

Total 35 Selected 1

2020

2019

2018

2017

2016

2015

2014

2013

Region Mandatory *

▼ Municipalities 2020, aggregated time

☒ Select all ☐ Deselect all

→ Select values from group

Search

☒ Beginning of word

Total 359 Selected 0

K-3001 Halden

K-3002 Moss

K-3003 Serpsborg

K-3004 Fredrikstad

K-3005 Drammen

K-3006 Kongsberg

K-3007 Ringerike

K-3011 Hvaler

Age Mandatory *

▼ 5-years groups

☒ Select all ☐ Deselect all

→ Select values from group

Sex

☒ Select all ☐ Deselect all

Total 2 Selected 0

☒ Optional variable

Males



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Ustertest: Menu on resultpage

Do the user find the tools they need in the new solution?

- Yes, everyone found the contact-person,
- saving the result in excel,
- saving a query, and
- The new Pivot-buttons work


[Choose table](#)


[Choose variable](#)

Population by region, period and sex

Result

▼ About table

▼ Show result as...

▼ Edit and Calculate

▼ Save result as...

▼ Save your query

▼ Hide empty rows

Pivot manual

Pivot clockwise

Pivot counterclockwise

	2007	
	Men	Women
01 Stockholm county	961,146	988,370
03 Uppsala county	160,281	162,989
04 Södermanland county	131,764	133,426
05 Östergötland county	210,531	210,278
06 Jönköping county	166,405	167,205
07 Kronoberg county	90,991	89,796
08 Kalmar county	116,411	117,423
09 Gotland county	28,241	28,881
10 Blekinge county	76,711	75,189
12 Skåne county	592,821	606,536
13 Halland county	144,821	146,572



Ustest: Conclusion

- PxWeb interface is more userfriendly
- All users in the ustest completed all the task faster than the first ustest in PxWeb
- Reach a limit for changes - need Next gen PxWeb



Button in PxWeb

▼ About table

▼ Show result as...

^ Edit and Calculate

↗ Change value order

⊗ Delete variable

<> Display text/code

% Per cent

+ Sum variable values

▼ Save result as...

▼ Save your query

	Persons			
	2015	2016	2017	2018
K-3001 Halden	30 328	30 544	30 790	31 03
K-3002 Moss	47 044	47 640	48 154	48 67
K-3003 Sarpsborg	54 192	54 678	55 127	55 54
K-3004 Fredrikstad	78 159	78 967	80 121	80 97
K-3005 Drammen	97 771	98 930	99 734	100 30
K-3006 Kongsberg	26 711	27 013	27 216	27 41
K-3007 Ringerike	29 712	29 801	30 034	30 28
K-3011 Hvaler	4 480	4 511	4 517	4 54
K-3012 Aremark	1 406	1 404	1 398	1 39
K-3013 Marker	3 613	3 610	3 597	3 56
K-3014 Indre Østfold	43 247	43 472	43 815	44 03
K-3015 Skiptvet	3 731	3 742	3 783	3 83

Result

▼ About table

▼ Show result as...

^ Edit and Calculate

↺ Pivot manual

↻ Pivot clockwise

↺ Pivot counterclockwise

↔ Change value order

Split time variable

Change decimals

Delete value

⊗ Delete variable

Change texts

<> Display text/code

% Per cent

— Subtract variable values

÷ Divide variable values

× Multiply variable values

▼ Save result as...

▼ Save your query

↺ Pivot manual

↻ Pivot clockwise

↺ Pivot counterclockwise

	0+1 Food, beverages and tobacco	0-9 Total	2+4 Crude materials, except fuels	3 Mineral fuels, lubric. and related materials	5 Chemicals and related products, n.e.s.	5-9 Processed goods
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▼ Footnotes

▼ API query for this table

Experience

- Usertest the solution several times
- The solution work different in different browser and mobilphones
- Changes in CSS has made it easier to change colour and font in PxWeb



Demo Resultpage

- New menu and footnotes:

<https://pxwebdemo.scb.se/pxweb/en/Example/>

- Fullscreen: <https://pxwebdemo.scb.se/sq/d1af822e-137a-493a-804e-36bb924b7bdd>



Thank you!

