TWINNING CONTRACT

JO/13/ENP/ST/23

Strengthening the capabilities of the Department of Statistics in Jordan

MISSION REPORT

on

Activity 4.8: Online Dissemination - III

Mission carried out by

Mr. Jesper Ellemose Jensen, Statistics Denmark

15-19 March2015

Version: Final

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List of Abbreviations

CSS	Cascading Style Sheet
DoS	Department of Statistics of Jordan
ToR	Terms of Reference
CNMM	Common Nordic Metadata Model
CMS	Content Management System
NSI	National Statistical Institute

Executive summary

This activity was designed to assist DOS in solving outstanding issues related to the CNMM (common Nordic Metadata Model), PX-Edit and PX-Web.

Since the last activity in January DOS has prepared an impressive number of files both using the PX-Edit tool and by inserting data directly into the CNMM (Common Nordic Metadata model). The tables prepared needs quality assurance / approval by the relevant responsible subject area staff / heads of division before being made available to the public.

DOS has nearly completed translating the user interface to Arabic. Some quality assurance is still recommended in this area. Some minor details in converting the software fully to Arabic / RTL are still missing and these can NOT be solved inside the time frame of the Twinning project.

Statistics Denmark considers the issues as minor and they should not be used to postpone the use of the software by DOS. The issues are apparent and not solve on the webpages of many other Arabic speaking NSI's. Right to Left issues with graphs and illustrations are apparent in printed publications prepared by DOS.

The major task needs for DOS get the full potential of the system is to put in place the necessary quality assurance and day to day updating procedures. These procedures must ensure that responsibility for quality, timeliness and punctuality do NOT rest with the programmers / technicians in IT.

1. General comments

This mission report was prepared within the Twinning Project "Strengthening the capabilities of the Department of Statistics in Jordan". It was the seventh mission to be devoted to Assessment of current database structure within Component 4: Data warehouse of the project. The mission was a logical follow up to the work done by Knudsen & Tininini (activity 4.2 and 4.3) and Ellemose Jensen & Wulff (Activity 4.6 – September 2014) and finally to Knudsen & Ellemose Jensen (Activity 4.7 – January 2015)

Purpose of the activity
o   To work on remaining challenges regarding the Arabic language version of the PX-web
o   To work on remaining challenges regarding the customization of the PX-web
o   Discuss quality assurance on the content in the online databank
o   To identify training needs regarding the dissemination tool

The consultant would like to express his thanks to the IT staff, all officials and individuals met for the kind support and valuable information which I received during the stay in Jordan and which facilitated the work of the consultant.

This views and observations stated in this report are those of the consultants and do not necessarily correspond to the views of EU, DOS or Statistics Denmark. The consultants and Statistics Denmark however have a long, significant and successful experience with implementing the involved tools in an EU twinning context. All comments and advice is therefore base on best practices and to the best of our opinions all advice should be applicable to the DOS / Jordanian context.

2. Assessment and results

DOS work since end of January 2015

Since the activity in January by Ellemose Jensen & Knudsen (Activity 4.8) DOS has continued the work i and created a number of tables in the installed version of the CNMM. Also tables had been added using PX-Edit. The results of the work undertaken by DOS can be seen on http://jorinfo.dos.gov.jo/PXWeb2014R2.

As recommended, DOS has worked on the translation of the user interface in to Arabic even further. DOS has also done some work on customizing the user interface to the needs of DOS.

Activity 4.8 assumes / worked with 4 main issues:
- Adapting PX-Web to Arabic language (RTL)
- Adapting PX-Web to "look and feel" of DOS website
- Quality assurance of the produced tables
- Procedures for quality assurance

Adapting PX-Web to Arabic language (RTL)

The recommendations by Ellemose Jensen was to keep the RTL problem external to the core of the software in order not to complicate further updates and to have a clean separation between the user interface and the core functionality of the software. The RTL issues are solved using scripting elements in the MASTERPAGE and by overwriting the style instructions using a dedicated RTL CSS file.

This method solves most but not all problems. The main problems are related to the presentation of data in the form of illustrations.

Graphical illustrations
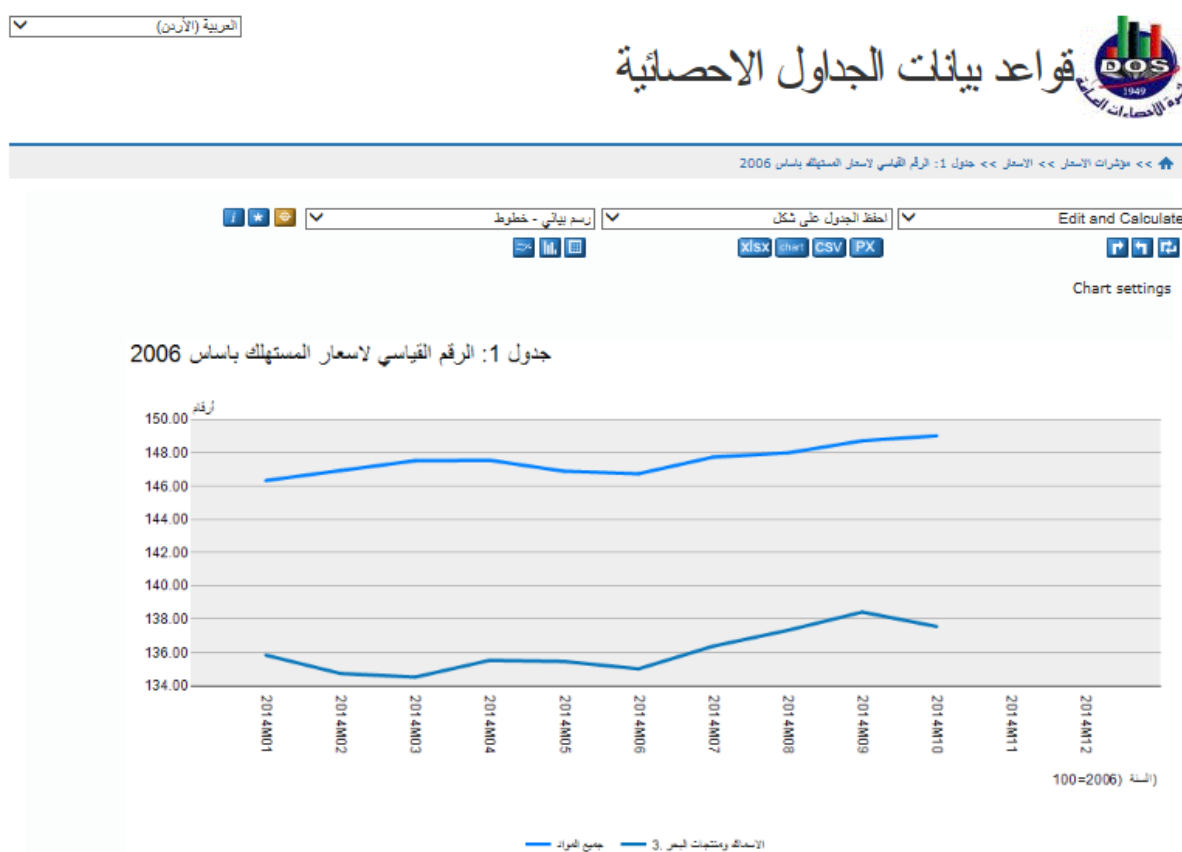
Compared to the ideal RTL setup the Y-axis needs to be moved from the left to the right. The title of the illustration needs to be aligned to the right and not to the left. Also the legend below the table should be change to show the "legend and then the text" when read from the right and not "the text and the legend".

Converting this functionality to Arabic will require a major effort that can't be undertaken inside the timeframe of the Twinning project. Microsoft has only recently made the necessary RTL functionality available in the dot.net chart component and this explains why this RTL problem is apparent on the websites of many other Arabic speaking statistical organisations. The axis and legend issues are also apparent in printed publications prepared by DOS and other Arabic speaking NSI's.

The issue is recognized and research into the issue indicates that it can be solved in the medium to long term. However we do not see the issues as something significant that should be used as a reason for not launching / using the PX-Web software at DOS.

Separation of variables in titles – download
When defining a table title PX-Web as standard, builds the title from the name of selected variable values and separate these with an ",". In Arabic we exchange the "," with the Arabic equivalent.
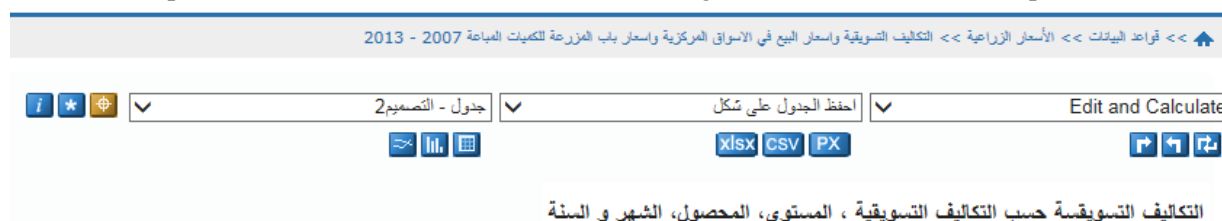
So the title appears as in the illustration above. However this change from European to Arabic comma is not possible when the file is downloaded in Excel format. Here the table title will appear with European commas as in the illustration below.

					2011	2012
التكاليف التسويقسة حسب التكاليف التسويقية, المستوى, المحصول, الشهر و السنة						
			ذره صفراء	كانون الثاني	0	0
النقل	المرتفعات			شباط	0	0
				اذار	0	0
				نيسان	0	0
			ذره بيضاء	كانون الثاني	0	0
				شباط	0	0
				اذار	0	0
				نيسان	0	0
			ذره مكانس	كانون الثاني	0	0
				شباط	0	0
				اذار	0	0
				نيسان	0	0

Assuming that most files are downloaded as excel for further work / calculations I as expert do not consider this to be a significant problem.

Navigation – Multiple records

Another RTL issue appears in the advanced selection screen. When selecting from a variable with more than 600 values the user is presented with the option to navigate in the record / result set. In the example above the numbers should read 120,121,122, 123…. when read from the right and not 132,131,130. The record set navigation is based on standard J-query functionality – that can't easily be changed to RTL format. In practice this problem is restricted to the two tables containing foreign trade statistics at the 4 and 9 digit levels. For all practical purposes this appears as an insignificant problem.

The Arabic design / language elements are found in the RtlCustom.CSS file and in scripting elements in the PxWeb master file. It is imperative that these files / changes are kept in place and carried over if and when PX-Web is updated to a new version. According to plan the next update will be in May 2015.

Adapting PX-Web to "look and feel" of DOS website

As part of the activities of the Twinning project DOS has developed a totally new design and structure of its webpage. A preliminary version of the front page is shown in the illustration below.
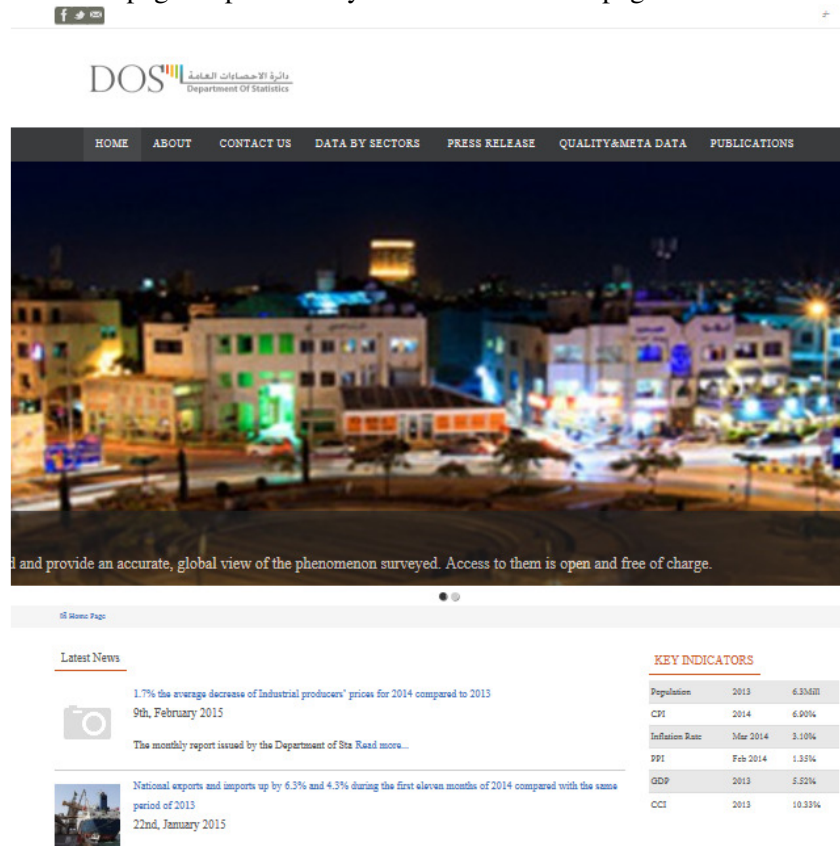
The new website has all it's navigation in the head and no navigation in a right or left panel. This design choice minimizes the potential RTL problems in the new website. For PX-Web DOS would like a design based on navigation in a sidebar containing the subject areas. Such a design could be inspired by the design found on the Palestine – National Statistical Monitoring System

(http://www.pcbs.gov.ps/NSMS/Default.aspx?px_language=en)

Customizing PX-Web to such an extent, is technically possible, but is well outside the time and resource scope of the twinning project. My personal opinion is that DOS should not introduce a side based navigation when the primary web sites navigation is based on top navigation supported by a footer with standard information. Also it is important to note that the current trend in website design is to have navigation without fixed panels. This trend is reflected in the design chosen for the new website as chosen by DOS and the Italian consultants working under the twinning project. When removing the navigation panels more screen space is available for contents / interactions with users and the website works betters / more efficiently on various sizes of screen resolutions be it on monitors, tablets or even smart phones.

A modified MASTERPAGE and a header and footer has be prepared that adapts PX-Web to the basic look and feel of the new website based on the "panel free" navigation of the standard PX-Web.

Illustration of PX-Web with header and footer adapted to the look of the new DOS website.

Some remarks / technical explanations on localisation are include in Appendix 4

Quality assurance on the content in the online databank

In my opinion the main outstanding issue is the quality control of the data that DOS has added to the system.

The quality of the tables can only be assured by the subject matter statisticians that have originally produced the statistics behind the tables.

In the short run (before making the system available to the public) all tables should be controlled and signed off by the relevant subject matter divisions.

At the time of writing it is not clear which unit / division that will have the overall responsibility for this task. It is however clear that quality assurance is not a task for the IT Department.

In the longer run it is imperative that written procedures and guidelines for table design is developed, and approved by senior management and then implemented in DOS. This work could be done / coordinated by the quality committee as dissemination is a logical part of the business processes described by the quality group.

Some examples of issues from the present version of PX-Web are included in Appendix 3.

Training needs regarding the dissemination tool

It is my opinion that DOS has no or very limited needs for additional training regarding the PX-family as a dissemination tool. The main outstanding issues are related to quality assurance and to establishing procedures to ensure that data is published according to international criteria for timeliness and punctuality and that the databases are updated whenever a press release is published. These issues can / should be addressed by DOS management and not through training in dissemination tools.

Proficiency training and documentation
PX-Web, PX-Edit and the CNNM are used in a large number of countries as remarked in the other activities some documentation is available. But it is imperative to understand that the documentation is written / designed for users / staff with a fundamental understanding of Excel, CSS, J-Query, HTML and database software. If DOS would like to strengthen it's staff potential for using the software it is recommended that training is given in the above mentioned technologies and not in the dissemination software as such.

3. Conclusions and recommendations

After activity 4.8 the following recommendations can be given to DOS:

- Have subject matter divisions confirm the quality of available data
- All English translations should be proof read by linguistic expertise and compare to international classifications / use of language
- Make PX-Web available to the public with data whose quality has been confirmed
- Use PX-Web in a set up with only a fixed header and fixed footer
- Finalise the localisation of PX-Web using CSS elements equivalent to the design theme of new website
- Do not await a new version of PX-Web with better RTL support
- Develop institution wide guidelines / rules for metadata used in tables
- Develop procedures to ensure timeliness and punctuality and to measure these

- Develop a long term strategy for adding tables / data to the PX-Web solution with clearly measurable dead lines
- Conduct regular meetings with selected users in order to prioritize new tables / statistics for the PX-Web solution

Appendix 1 – Terms of Reference

<div style="border:1px solid">

Terms of Reference

EU Twinning Project JO/13/ENP/ST/23

15-19 March 2015

</div>

Component 4: IT and Online Dissemination

Activity 4.8: Online Dissemination - III

0. Mandatory results and benchmarks for the component
- New database structure defined and online dissemination improved (Apr 2015)
- Assessment report on current situation (Jan 2014)
- Develop a plan for the database structure (July 2014)
- Improve the IT-security (Jan 2015)
- Improve the online dissemination (Apr 2015)

1. Purpose of the activity
- To work on remaining challenges regarding the Arabic language version of the PX-web
- To work on remaining challenges regarding the customization of the PX-web
- Discuss quality assurance on the content in the online databank
- To identify training needs regarding the dissemination tool

2. Expected output of the activity
- Remaining challenges regarding the Arabic language version of the PX-web either solved or alternatively described in the mission report
- Increased ability of the DoS dissemination staff on how to improve and update the exterior design for PX-WEB that meet the needs of the DOS
- Quality assurance on the content in the online databank – Remarks / suggestions for improvements on at least 5 tables (either English or preferably bilingual)
- Transfer of the Danish and in general the European Union, experience regarding online dissemination
-

3. Participants

<u>DoS</u>
Mr Tayseer Deeb, Director of Information Technology (*Component Leader*)

Rana A. Swaidat, IT/ Head of Development Unit
Rania Abu Dhaim, Head of programming and analysis
Abdullah Al –Sous, Web Dissemination section/IT
Manal Khuffash, Web Dissemination section/IT
Mohammad Hasan Network Engineer/ IT
Hussam Abu Shukor

<u>MS experts</u>
Mr Jesper Ellemose Jensen, Chief Adviser, International Consulting, Statistics Denmark

Programme for the mission

Time		Place	Event	Purpose / detail
Sunday, morning	08.30 – 10.00	Hotel /DoS	Meeting with RTA	To discuss the program of the week
Sunday, morning	10.00 – 12.00	DoS	Meeting with BC Component Leader and BC Experts	Discussions of the weeks' program
				Presentation by DoS on the current status regarding PX-web
				DoS presentation of RtL problems in latest CSS version
	12.00 – 01.00		Break / Preparations / Report writing	
				Break / Preparations / Report writing
Sunday, afternoon	01.00 – 03.30	DoS	Meeting with BC Component Leader and BC Experts	Work on remaining challenges. DoS presentation of new website design and discussions on which elements that can / should be carried over to the PX-Web: Including header / footer / table elements
	03.30 – 04.00		Preparations / Report writing	
				Preparations / Report writing
Monday, morning	08.30 – 09.30	DoS	Preparations / Report writing	Preparations / Report writing
	09.30 – 12.00		Meeting with BC Component Leader and BC Experts	Advice / discussion on tables prepared by DoS from a user / dissemination perspective. It would be preferably if these tables are agreed before the mission and can be seen from Denmark.
	12.00 – 01.00		Break / Preparations / Report writing	
				Break / Preparations / Report writing
Monday, afternoon	01.00 – 03.30	DoS	Meeting with BC Component Leader and BC Experts	Work on CSS / RTL / identified issues
				Preparations / Report writing
	03.30 – 04.00		Preparations / Report writing	
Tuesday, morning	08.30 – 09.30	DoS	Preparations / Report writing	Preparations / Report writing
	09.30 – 12.00		Meeting with BC Component Leader and BC Experts	Continued.
	12.00 –		Break / Preparations	Break / Preparations / Report writing

	01.00		/ Report writing	
Tuesday, afternoon	01.00 – 03.30	DoS	Meeting with BC Component Leader and BC Experts	Continued.
	03.30 – 04.00		Preparations / Report writing	Preparations / Report writing
Wednesday, morning	08.30 – 09.30	DoS	Preparations / Report writing	Preparations / Report writing
	09.30 – 12.00		Meeting with BC Component Leader and BC Experts	Continued.
	12.00 – 01.00		Break / Preparations / Report writing	Break / Preparations / Report writing
Wednesday, afternoon	01.00 – 03.30	DoS	Meeting with BC Component Leader and BC Experts	Continued.
	03.30 – 04.00		Preparations / Report writing	Preparations / Report writing
Thursday, morning	08.30 – 09.30	DoS	Preparations / Report writing	Preparations / Report writing
	09.30 – 11.30		Meeting with BC Component Leader and BC Experts Ad-hoc meetings	Final clarifications with BC Experts, preparation of report and presentation for BC Project Leader
Thursday, morning	11.30 – 12.30	DoS	Meeting with BC Component Leader	Presentation for BC Project Leader
Thursday, noon	12.30 – 01.00	DoS	Debriefing with BC Project Leader	Conclusions and decisions and their consequences for the next activity and the implied work program for BC Experts

Appendix 2 – Persons met

Quality group – selected management staff
Micheal Ishak Jaanineh – Family surveys
Rafea Abdalla Al-Qudah - Population and Social Surveys
Bassam Al Zain – Agriculture
Mohammad Khalaf – Quality
Shaher Al-Shawabkah – Economical surveys

IT-staff
Tayssir Anis – Information Technology
Hussam Abou el Shukour – Information Technology
Ahmad Mowafi – Twinning counterpart
Rana A. Swaidat, IT/ Head of Development Unit
Rania Abu Dhaim, Head of programming and analysis
Abdullah Al –Sous, Web Dissemination section/IT
Manal Khuffash, Web Dissemination section/IT
Mohammad Hasan Network Engineer/ IT

Appendix 3 – Examples for Quality Assurance

All illustrations / remarks are based on the English version of the implementation done by DOS. The issues are illustrative but I supposed quality is better in Arabic due to better familiarity with the language.
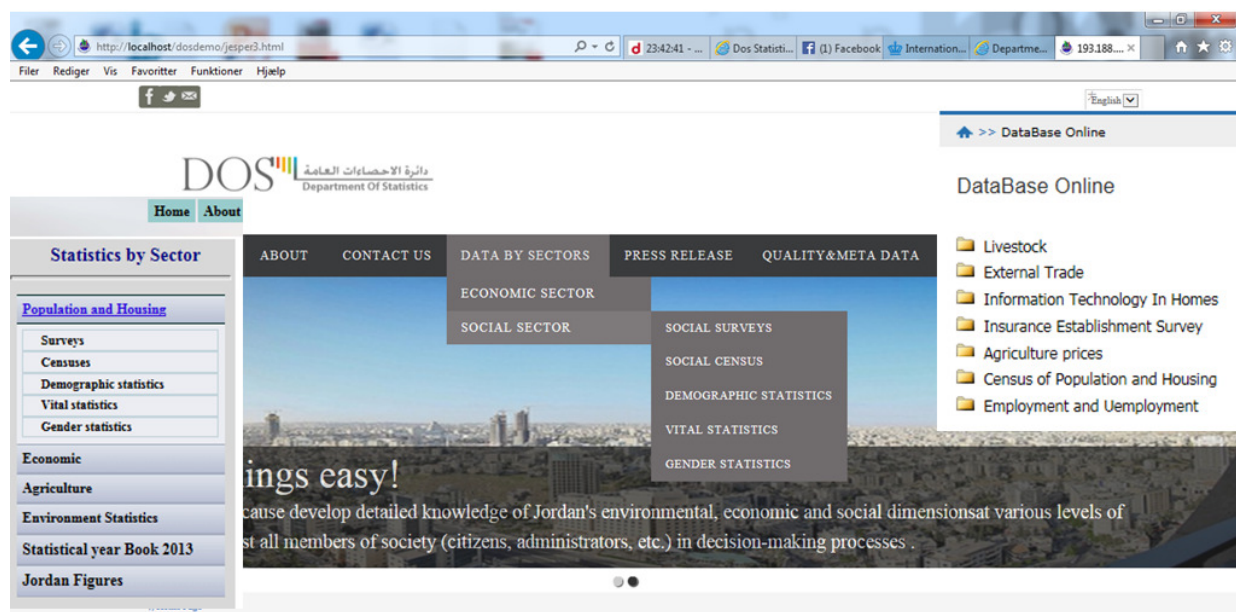
Consumer:

- Title needs alignment with web / publishing structure
- Table 2,3 and 4 are not related to consumers but are business statistics

⌂ >> Consumer

Consumer

- Table 1: Consumer price DOS by Commodity and Time (2006=100) ▣ 🗓
- Table 2: Monthly Producer Price Index by ISIC4 and Time (1999=100) ▣ 🗓
- Table 3:Monthly Quantity Index Number by ISIC4 and Time (1999=100) ▣ 🗓
- Table 4:Wholesale Price Index by Grouo & Activites and Time (1998=100) ▣ 🗓

- Unit: Index not number
- Creation date: Confusing – not day of first da
- Time: Not chronological
- Time: Empty Periods

Table 1:

English ⌄

Dos Statistical Online Database

⌂ >> Consumer >> Table 1: Consumer price DOS by Commodity and Time (2006=100)

| Edit and Calculate ⌄ | Save table as ⌄ | Table - Layout 2 ⌄ | ➕ ⭐ ℹ |

PX CSV xlsx

Note: The table has been cropped. A maximum of 1000 rows and 30 columns can be displayed in the table on screen

Table 1: Consumer price DOS by Commodity and Time (2006=100)

	2014M01	2014M02	2014M03	2014M04	2014M05	2014M06	2014M07	2014M08	2014M09	2014M10	2014M11	2014M12	2013M01	2013M02	20:
CPI-Indeks	146.33	146.93	147.52	147.55	146.89	146.74	147.74	147.99	148.72	149.02	..	..	141.59	142.49	:
Alcohols	140.75	166.99	168.12	168.11	168.52	168.55	168.55	168.55	168.55	168.56	..	..	139.18	139.48	:
Cigarettes	118.79	135.67	136.09	136.11	136.15	136.15	136.15	136.14	136.14	136.14	..	..	118.26	118.13	:

Information

Unit
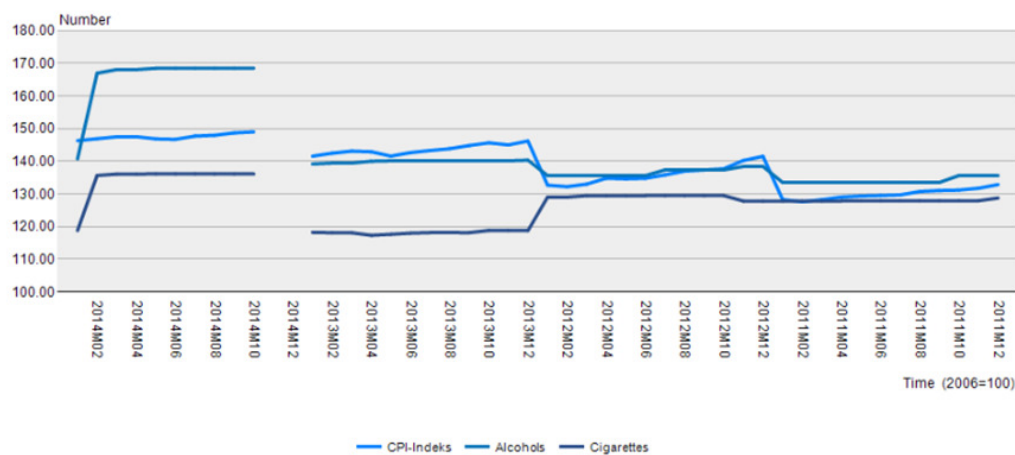   Number

Creation date
    1/1/1998

Table 1:

- Time is not chronological
  - Ruins Graph
  - Calculations of changes
- Number?
  - Y axis is Index not Number

Table 2,3 and 4: Same problems as Table 1

- Relative Weight?
- Weights are problematic together withe data

>> Consumer >> Table 2: Monthly Producer Price Index by ISIC4 and Time (1999=100)

Table 2: Monthly Producer Price Index by ISIC4 and Time (1999=100)

	Relative Weight	2014M01	2014M02	2014M03	2014M04	2014M05	2014M06	2014M07	2014M08	2014M09	2014M10	2014M11	2014M12	2013M01	2013M02
All Items	1,000.00	220.51	218.79	219.65	217.02	218.12	218.51	219.16	219.43	217.16	..	..	..	227.36	225.80
1600 Manufacture of Tobacco Products	24.01	141.02	141.02	141.02	141.02	141.02	141.02	141.02	141.02	141.02	..	..	..	127.73	127.73

More trade:

🏠 >> DataBase Online >> External Trade >> Monthly >> External Trade Commodity 2003 - 2014

External Trade by Kind of Trade, Month, Commodity and Time

Information Footnotes
Mark your selections and choose between table on screen and file format. Marking tips
For variables marked ✱ you need to select at least one value

Kind of Trade	Month
Total 3 Selected 0	Total 12 Selected 0
Import Export Re-Export	January February March April May June
Search ▶	Search ▶
☐ Beginning of row	☐ Beginning of row

Commodity	Time ✱
Total 116 Selected 0	Total 12 Selected 0
Total Live animals Meat and edible meat offal Fish and crustaceans,molluscs and other aquatic invertebrates Dairy produce; birds'eggs;natural honey; edible products of animal origin, not elsewhere specified or included Eggs in shell	2014 2013 2012 2011 2010 2009
Search ▶	Search ▶
☐ Beginning of row	☐ Beginning of row

- No logical elimination of trade
- Time should be a singe variable – not two
- Use same time format as in the index 2014M01,2014M02 ..

Time

- Recommended format
- 2014M01,2014M02,2014M03,…
- 2014Q1,2014Q2,2014Q3,2014Q4,….
- 2012,2013,2014,…
- User either ascending or descending
- NEVER have breaks in time
- NEVER mix different types of periods
- Don't add time periods without data

Consistency

- Gov., gov or Governorate?

Key word:

|				
1 000 DKK	1 000 DKK.	DKK 1 000	Dkk. 1 000	Thousand DKK.
1.000 DKK	1.000 DKK.	DKK 1.000	Dkk. 1.000	Thousand DKK
1000 DKK	1000 DKK.	DKK 1000	Dkk. 1000	Thousand Dkk
1 000 Dkk	1 000 dkk	DKK. 1 000	dkk 1 000	Thousand Dkk.
1.000 Dkk	1.000 dkk	DKK. 1.000	dkk 1.000	thousand DKK
1000 Dkk	1000 dkk	DKK. 1000	dkk 1000	thousand DKK.
1 000 Dkk.	1 000 dkk.	DKK 1 000	dkk. 1 000	thousand Dkk
1.000 Dkk.	1.000 dkk.	Dkk 1.000	dkk. 1.000	thousand Dkk.
1000 Dkk.	1000 dkk.	Dkk 1000	dkk. 1000	thousand dkk
				thousand dkk.

Standardization

Appendix 4 – Remarks on localisation

Documentation and recommendations on how best to adapt the look and feel of the PX-Web user interface is available from Statistics Sweden:

http://www.scb.se/Upload/PC-Axis/Download/PX-Web/Customize-px-web.pdf

The documentation assumes or is written for staff having at least a basic understanding of CSS / HTML.

Below is an illustration of a minimum adaptation of PX-Web to mimic the "look and feel" of the new website layout developed by the Twining project and the ISTAT experts.
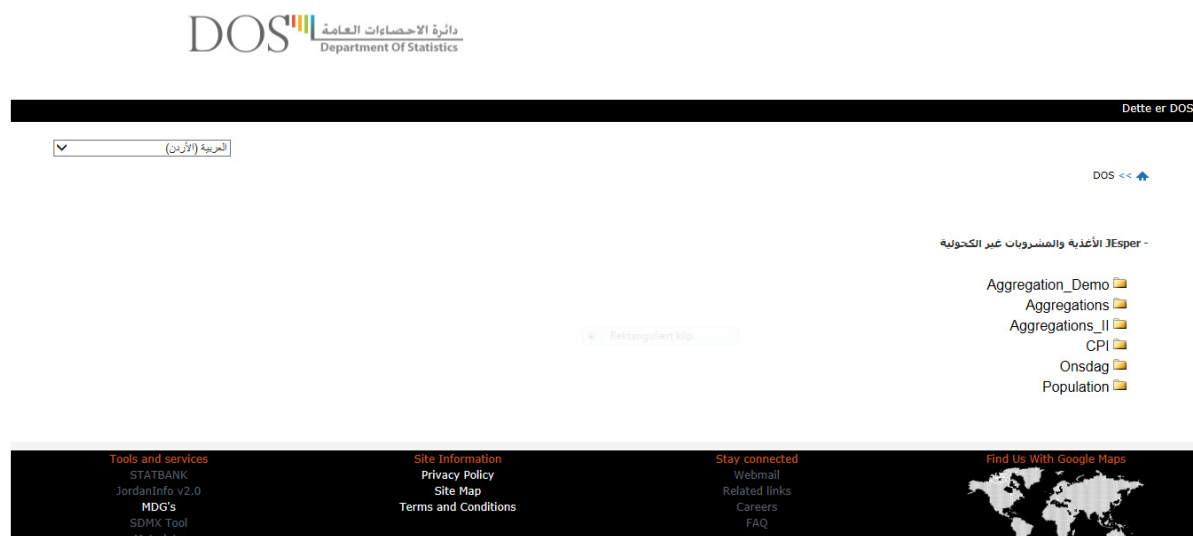
A header and a foot file containing plain HTML is include in the PxWeb.ASP.NET.MasterPage

Example of inclusion of file with footer information

```
<div id="footer">
    <div class="footerleft">
        <asp:Label runat="server" EnableViewState="true " ID="lblFooterText" />
    </div>
            <div class="footerright">
        <asp:ContentPlaceHolder id="ContentPlaceHolderFooter" runat="server">
        </asp:ContentPlaceHolder>
    </div>
    <div style="clear: both;"> </div>
    </div>
    </div>
</form>
<div class="DOS_footer">
        <!--#include file ="jesper.html"-->
</div>
```

Illustration from file containing the fixed footer

```html
<!-- #Second widget-ares -->

<div id="textwidget1">
<h3 class="widget-title"><span>Site Information</span></h3>
<ul>
<li>Privacy Policy</li>
<li>Site Map</li>
<li>Terms and Conditions</li>
</ul>
</div>

<div id="textwidget1">
<h3 class="widget-title"><span> Stay connected</span></h3>
<ul>
<li><a href="https://webmail.gov.jo/">Webmail</a></li>
<li><a href="http://193.188.88.243/wordpress/links">Related links</a></li>
<li><a href="http://193.188.88.243/wordpress/jobs/">Careers</a></li>
<li><a href="http://193.188.88.243/wordpress/faq/">FAQ</a></li>
</ul>
</div>
<!-- #third .widget-area -->
```

CSS markup instructions for include files

It is recommended that all styles needed for the top and header file are included / defined in the custom.css file.

```html
<link href="Resources/Styles/Custom.css" rel="stylesheet" type="text/css" media="screen" />
```

The custom.css file overrides layout information found in PX-Web's other style sheets.

Example of overriding

In the example below some of PX-Webs basic settings like width, color, font size and family is replaced by others more similar to those used in the wordpress themes.

```css
Custom.css  ✕ jesper.html      PxWeb.Master*

    /*Width of PX-Web is defined in wrap div */
    #wrap
    {
        max-width:1250px;
        width:99%;
        background-color:White;
        }


    /*New DOS website appears to use Tahoma */
     .menu_databasename
     {
        font-family:Tahoma;
        font-size:12px;
        font-weight:bold;
        }

    .hierarchical_tableinformation_title
     {
        font-family:Tahoma;
        font-size:12px;
        font-weight:bold;
        }

    #pcaxis_tablediv .table-title
     {
        font-family:Tahoma;
```

```css
Custom.css  ✕ jesper.html      PxWeb.Master*

    /*Width of PX-Web is defined in wrap div */
    #wrap
    {
        max-width:1250px;
        width:99%;
        background-color:White;
        }


    /*New DOS website appears to use Tahoma */
     .menu_databasename
     {
        font-family:Tahoma;
        font-size:12px;
        font-weight:bold;
        }

    .hierarchical_tableinformation_title
     {
        font-family:Tahoma;
        font-size:12px;
        font-weight:bold;
        }

    #pcaxis_tablediv .table-title
     {
        font-family:Tahoma;
```

In DOS current running version of PX-Web the specific Arabic CSS instructions are in another style sheet – RtlCustom.CSS as these instructions are only loaded when the users selects the Arabic language it is NOT possible to combine the RTL CSS with the CUSTOM.CSS .