

TWINNING CONTRACT

Support to Statistics

Kosovo



MISSION REPORT

on

Information Technology System and Dissemination
Development of Dissemination Database I - Initial Pilot Installation

Component no 4.5.1

Mission carried out by
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8-10 July 2014

IPA 2012

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List of Abbreviations

KAS	Kosovo Agency for Statistics
ToR	Terms of Reference

Executive Summary

- The mission was the second in component 4 dedicated to dissemination. The goal of component 4 is to:
- Improve web dissemination for selected statistics including improvement of ASK' website to make it a more user-friendly and flexible dissemination tool.
- Develop guidelines for the design of tables and graphs, also to be applied for dissemination on the web;
- Develop a dissemination database, including more complete metadata covering different aspects related to data quality;

The main effort is directed at providing KAS with a dissemination database based on PX-Web software. This mission (4.5.1) focused on two activities: 1) installing the latest version of the Px-Web software (May 2014- Release 1) and 2) Making the KAS staff familiar with creating and editing metadata in the PX-Edit software as well as importing the data files into the database. An introductory training session in PX-Edit functionalities was set up with participants from IT and production units.

1. General comments

This mission report was prepared within the Twinning Project „Support to Statistics”. It was the first mission to be devoted to Improvement of Internet Dissemination (4.5.1) within Component 4 of the project. The mission was aimed at installing the proper Px software (PX-Web May 2014 R1 version and PX-Edit 2013) and start a training session using the software.

The concrete objectives of the mission were:

Installation of new PX-web version May 2014 and teh latest PX-Edit version 2013
Training assistance in creation PC-Axis files from Excel and advice in standardizing the mandatory metdata.

The consultants would like to express their thanks to all officials and individuals met for the kind support and valuable information which they received during the stay in Kosovo, and which highly facilitated the work of the consultants.

This views and observations stated in this report are those of the consultants and do not necessarily correspond to the views of EU, KAS or Statistics Denmark.

2. Assessment and results

Activity 4.5.1 will ensure the following outputs:

Mission report and installed PX-web newest vedson. A basic understanding of the connection between data and metadata in the px-file format.

PX-Web version 2014 was installed on a number of computers for testing according to the installation guide http://www.scb.se/sv/_/PC-Axis/Programs/PX-Web/PX-Web-2014/. When it turns to a production situation, a central installation is advised. (KAS has previous tested PC-Axis 2008).

License fee is only to be paid when PX-Web is used in production and available on KAS web site. The price is still not fixed by Statistics Sweden it is expected to be finalized in September 2014. The Twinning project can pay for the first two years of operation.

PX-Edit was installed on the training room computers according to the guide http://tilastokeskus.fi/tup/pcaxis/lataus_tyokalut_en.html.

PX-edit is the tool where metadata to the file is entered and edited. Some mandatory information has to be entered in order to get the output in a correct PX-file format. The main features and functions of PX-web and PX-edit were demonstrated while doing the practical exercises creating PX-files.

KAS delivered some excel files – Price statistics and Foreign trade statistics, which were imported to PX-Edit. The experts showed how these file should be structured in order to be read by PX-Edit. The mandatory key words had also to be filled in. A detailed description of the necessary steps for creating the files is attached as ANNEX 5 to this report.

The list of all key words (mandatory and optional) is to be found in the PC-Axis documentation http://www.scb.se/Upload/PC-Axis/Support/Documents/PX-file_format_specification_2013.pdf and the ones marked in red colour in PX-Ed it.

A very useful description of PX-Edit functions is available in the document PX-edit 2.4 http://tilastokeskus.fi/tup/pcaxis/download/px_edit_documents.zip

Variable: time da

Keywords Meta part View Select Sort Edit Add Anonymize

keyword	value
CHARSET	ANSI
AXIS-VERSION	2000
LANGUAGE	da
LANGUAGES	
CREATION-DATE	
NEXT-UPDATE	
PX-SERVER	
DIRECTORY-PATH	
UPDATE-FREQUENCY	
TABLEID	
SYNONYMS	
DECIMALS	1
SHOWDECIMALS	0
ROUNDING	
MATRIX	
AGGREGALLOWED	
SUBJECT-AREA	
SUBJECT-CODE	
COPYRIGHT	
DESCRIPTION	
TITLE	Unemployed in per cent of the labour force by time, sex and age
DESCRIPTIONDEFAULT	
CONTENTS	Unemployed in per cent of the labour force
UNITS	
CONTVARIABLE	
LAST-UPDATED	20140714 09:00
STOCKFA	
CFPRICES	
DAYADJ	
SEASADJ	
CONTACT	
REFPERIOD	
BASEPERIOD	
DATABASE	StatBank
SOURCE	Statistics Denmark

☐ Hide Set... Defaults Import...

Key words can be imported from a file (Import button), and keywords that are general for all tables can be entered by clicking the Default button. This is e.g. charset, Axis version, language.

KAS asked for a complementary list with definitions/examples of the mandatory keywords.

Statistics Denmark will provide this:.

DECIMALS: the number of stored decimals in the table

SHOWDECIMALS: the number of decimals to be displayed

MATRIX: a short name of the table, max length 20. Suggested to be the file name, too

SUBJECT-AREA: A standard name for the subject. Usually there will be 15-25 different subject areas, e.g. Population, Education, National Accounts, Prices, Foreign Trade

SUBJECT-CODE: A unique code that corresponds to the subject area. Length max 20. This can e.g. be POP01, or simply 001

CONTENTS: describes the main content of the table, e.g. Population, *Unemployed*, Traffic accidents.

TITLE: is **automatic generated** from the CONTENTS and the VARIABLES, e.g. *Unemployed by age and sex*.

DESCRIPTION: What is written here will overwrite the automatic generated title.

UNITS: Measure of counting, e.g. Number, Tons, 1000s, 1000 Euros, Index.

Each of the keywords and their application is also described in Appendix 5.

3. Conclusions and recommendations

- It is recommended that KAS goes on creating PX-files from Excel to PX-Edit.
- However, it is important that a list of agreed subject areas and subject codes is ready before start, and that this list is distributed to the persons entering metadata to PX-Edit.
- It is recommended that the database will start filling the monthly statistics first, as there are more requests from external users on these. This means Foreign Trade and Price statistics should be prioritized.
- It is recommended that a formal group representing IT and production units meet once a week to secure the progress.
- It is also recommended that external users be invited when the first couple of statistical areas are ready for publishing. This is planned to be November 2014.
- As a start it is recommended that the PX-Edit work is centralised in IT, and the creation of the Excel files can be prepared by the production units, following the rules for making structured Excel files.
- IT should also be asked to be the central manager of reading the files into PX-Web.
- KAS is invited to send files to Statistics Denmark for testing and comments.
- The Twinning project will investigate if it can invite KAS staff to the annual PC-Axis meeting- in Copenhagen on October 2 and 3 2014

Action	Deadline	Responsible person
Defined a fixed release time of day	?	Management KAS
Get the PX-Web licence price from Statistics Sweden	August	DST
Agreed list of subject areas/codes	August	KAS
Roadmap of actions	August	KAS
Provide MS consultants with already produced PX-files using PX-Edit	August-September	KAS
User interface translated to Albanian	September	KAS ?
User interface translated to Serbian	September	KAS ?

Annex 1. Terms of Reference

Component 4: Information Technology System and Dissemination

Activity 4.5.1: Improvement of Internet Dissemination

Scheduling:

Tor –ready date: 24 June 2014

Start / end of activity: 8 July – 10 July 2014

Reporting time: 18 July 2014

Mandatory result of the component:

Mandatory Result	Intervention logic	Benchmarks	Sources of information	Assumptions
Mandatory Result 4.5.1	Development of Dissemination Database I – Initial Pilot Installation	<ul style="list-style-type: none"> • Mission report uploaded on project homepage • Pilot installation of PX-Web completed • Initial training of KAS staff in PX-Web / PX-Edit completed • Recommendations and time schedule for implementation and production of content for database discussed 	<ul style="list-style-type: none"> • KAS website • Dissemination database 	<ul style="list-style-type: none"> • Sufficient absorption capacity • Functioning IT-technology • Low turn-over of staff involved in implementation • Staff works on project related tasks in between missions

Subject / purpose of activity: 4.5.1 activity

Installation of new PX-web version

Expected output of the 4.5.1 activity

Mission report and installed PX-web newest version

The activity 4.5.1 is a follow up on mission 4.3.1 conducted in May 2014. The mission report 4.3.1 stated that the following tasks should be accomplished before mission 4.5.1 can take place:

Action	Deadline	Responsible person
Defined a fixed release time of day	?	Management KAS
Coordination of activities Twinning-SIDA	End August	Twinning Project RTA- Carling SIDA LTA (SCB)
Prioritise CoP actions	JULY 2014	KAS
Roadmap of actions	JULY	KAS
Provide MS consultants with already produced PX-files from previous projects	End June 2014	KAS
Provide MS consultants with example of trade statistics expected for output database	End June 2014	
Provide MS consultants with CPI data in excel / CSV format	End June 2014	
Install new PX-web version	JULY (next mission)	KAS/ Twinning

KAS resources:

- Mr. Burim Limolli, Head of IT - Division, burim.limolli@rks-gov.net KAS
- Mr. Dardan Gjoshi, IT Administrator, dardan.gjoshi@rks-gov.net, KAS
- Mr. Mentor Shala, Software Developer, mentor.shala@rks-gov.net, KAS
- Mr. Idriz Shala, GIS expert, idriz.shala@rks-gov.net, KAS
- Mr. Liridon Uka, IT Expert, liridon.uka@rks-gov.net, SIDA
- Mrs. Hazbije Qeriqi, Communication Senior hazbije.qeriqi@rks-gov.net
- Ms. Drita Sylejmani, Dissemination Officer, drita.sylejmani@rks-gov.net, KAS
- Mrs. Mensure Cerkezi, External Trade Officer, mensure.cerkezi@rks-gov.net, KAS

KAS Twinning team:

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RTA Counterpart Ms.Teuta Zyberi, International Relations Officer, teuta.zyberi@rks-gov.net

Member state resources:

Ms Annegrete Wulff, Head of Division, Statistics Denmark, awu@dst.dk

Mr Jesper Ellemose Jensen, Chief Adviser , Statistics Denmark, jej@dst.dk

Twinning resources:

Mr Per Knudsen, RTA, pkn@dst.dk

Ms Nora Zogaj, RTA assistant, nzogaj@yahoo.com

Background

The AGA report 2012 states that there is a strong need to improve KAS' website to make it a more user-friendly and flexible dissemination tool.

Component 4 within the Twinning Project has three mandatory results to meet these needs:

Tender specification for internal network (Handled by SIDA)

KAS website and user friendliness improved
Dissemination Database installed and available

In general the activities in component 4 will address the following issues:

- Improve web dissemination for selected statistics including improvement of ASK' website to make it a more user-friendly and flexible dissemination tool;
- Develop guidelines for the design of tables and graphs, also to be applied for dissemination on the web;
- Develop a dissemination database, including more complete metadata covering different aspects related to data quality;

Activities to be undertaken in preparation for the mission:

- Mission Report. IT and Dissemination 4.3.1 (Jensen & Wulff)

Annex 2. Program, - July 2014

Day	Place	Time	Event
1	KAS	09.00	Introductory remarks to this part of component 4
		09:15	KAS will brief the experts on state of activities stated in mission report 4.3.1 need to support the implementation of an output database based on PX-Web / PC-Axis. As KAS has some experience with the platform already this experience should be briefed to the MS-Experts
		10:30	Coffee
		11:00	MS experts will present functionality / user interface of latest version of PX-Web 2014R1 – Including PX-Web's development road map.
		12:00	Lunch
		13:30	Discussions / demonstration of how the user interface can be translated into Albanian Changes of user interface – Should take into consideration plans for changes to KAS web site.
		14:30	Coffee
		15:00 – 16:00	Possibilities for test and development set up at KAS – Possibilities for production set up Discussion / dialog with KAS Head of IT and SIDA IT resident. We need to talk about available hardware and what SIDA can be asked nicely to provide- can be placed at outside the program when convenient but important.
2	KAS	09:00-16:00	Training in producing PX –files using PX-Edit software. (KAS should bring data in the form of excel files for this, including CPI and trade data).
3	KAS	10:00-12:00	Debriefing: Experts, KAS Project Leader, Component Leader, and RTA
			Report writing

Annex 3. Persons met

KAS:

- Mr. Burim Limolli, Head of IT - Division, burim.limolli@rks-gov.net KAS
- Mr. Dardan Gjoshi, IT Administrator, dardan.gjoshi@rks-gov.net, KAS
- Mr. Mentor Shala, Software Developer, mentor.shala@rks-gov.net, KAS
- Ibish Asllani, Head of Price Statistics Division, ibish.asllani@rks-gov.net
- Raif Gashi, Senior officer for price statistics, Department of Economic Statistics and National Accounts, Price Statistics Division, Raif.Gashi@rks-gov.net
- Mentor Shala, Software Developer, mentor.shala@rks-gov.net, KAS
- Besarta Thaçi, Officer on Labour Trade Statistics, Department of Social Statistics, Besarta.T.Thaci@rks-gov.net

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RTA Team:

Per Knudsen, RTA

Nora Zogaj, RTA Assistant

Annex 4. PX-WEB Overview and PX-Edit Overview



PX-Web May 2014

Content PX-Web 2014

This year there will be two releases, one in May and one in December.

Content of PX-Web 2014 May R1 Was released in 28 May

- Search functionality
- Logging of user statistics
- User authentication on table level
- Metadata for Search Engines
- Navigation settings
- New Menu settings
- New selection settings

Bug fixes

- You won't have to create an empty selection for variables that is eliminated.
- The API should work with Json-stat

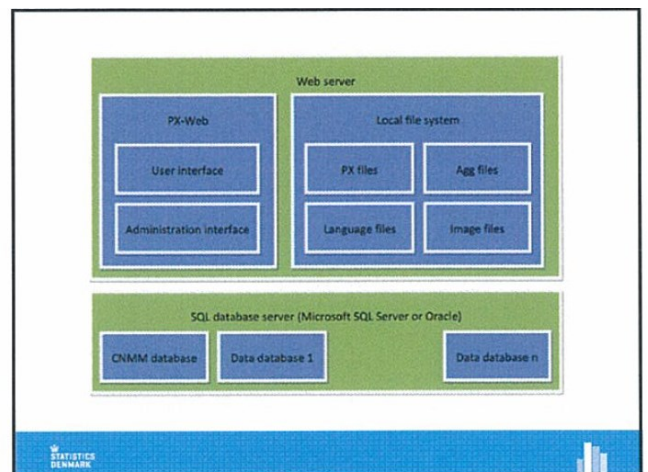
PX-Web December 2014

Content of PX-Web 2014 December R1 Will be released in December

- Saved query
- Implement Data Model 2.3

Bug fixes

- Stepping back from table view to selection view keeps its selection
- More to come



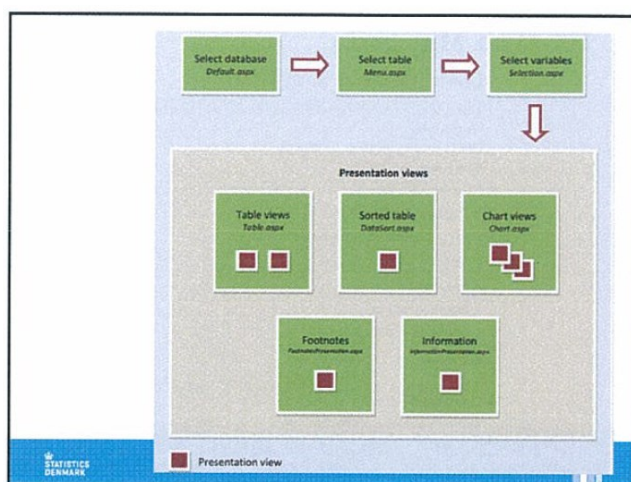
Two parts

- **Administration interface** - The Administration interface is used by PX-Web administrators to manage and maintain their PX-Web installation.
- **User interface** - The User interface is the part of the application that is exposed to the end users, the actual dissemination application

Permissions

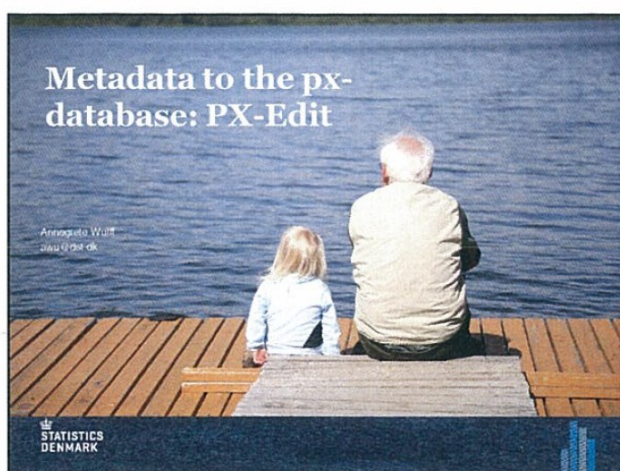
The user account that runs PX-Web must have

- **Modify rights to setting.config** to be able to modify and save settings from the Administration interface.
- **Modify rights to the Language folder** and all of the folder content, so that new language can be added and existing language string be modify from the Administration interface.
- **Modify rights to the Menu.xml** files that are in the PX database folder, so that the content can be updated from the Administration interface when generating the database description file.



Administration tool

- The Administration tool contains tools for generating database files, management of language files and tools for reloading system data.
- The Administrator tool is protected by username and password. The default username and password is *admin* and *pwd*.
- Per default the Administration interface is also protected by an IP filter and only the local loopback address is allowed access it.



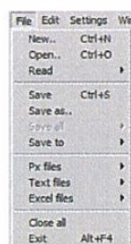
PC-Axis Programmes

- PX-Web: Presenting dynamic tables in the on-line database
- PX-Edit: Creating and editing the px-file (UNICODE)
- PC-Axis: Checking and editing (but be aware: it is not UNICODE!)

PX-files

- Mandatory key words
 - MATRIX, CONTENTS, UNIT, STUB, HEADING, VALUES, DECIMALS, DATA
- Optional key words
 - AGGREALLOWED, ATTRIBUTES, AUTOPEN, CELLNOTE, ELIMINATION, LANGUAGES,
- Complete description:
 - http://www.scb.se/Upload/PC-Axis/Support/Documents/PX-file_format_specification_2013.pdf

File Menu /1



- New..
 - create a new table from scratch
- Open..
 - open a .px file
- Read >
 - sub-menu for special cases
- Save
 - save the current table as a .px file with the same (existing) name
- Save as..
 - save the current table as a .px file with a (possibly) new name

New Table

- Title and variable names
 - a new line will be added when needed
 - value names will be created from these
- The number of values for each variable
- Numeric codes may be created if needed (1, 2, 3, ...)
- The variable may be positioned in rows (default) or in columns
- The **Create** button makes the table with the Fill Items

File/Read Menu /1

- Text file
 - read a structured text file
- Clipboard
 - read a structured table from clipboard
 - active only if there is something available
 - may be used e.g. with OpenOffice
- File list
 - read the files the names of which are in the clipboard
 - such list may be created in PX-Tool

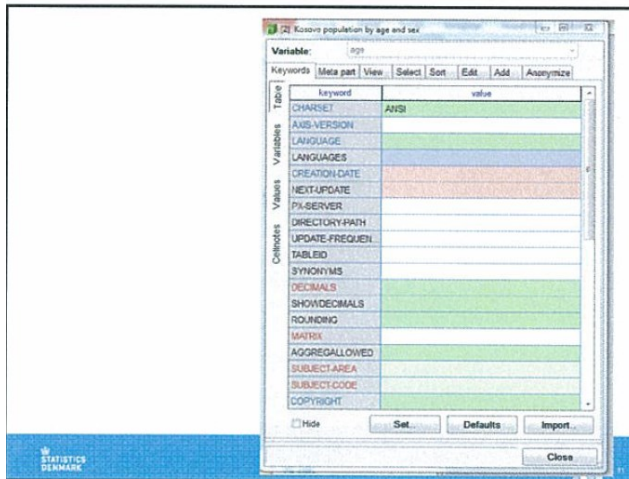
File/Read Menu /2

- Excel file
 - read a structured table from an .xls file
 - first worksheet, or all sheets
 - if there are cell comments, Edit tries to move them to appropriate keywords
 - the footnotes should be separated with at least two empty rows from the table
 - uses and needs the installed Excel
- Excel
 - read a structured table (or all sheets) directly from the active spreadsheet
 - the same logic as in Excel file reading

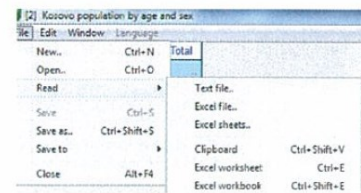
Compare: Standards to be kept

PX-Edit

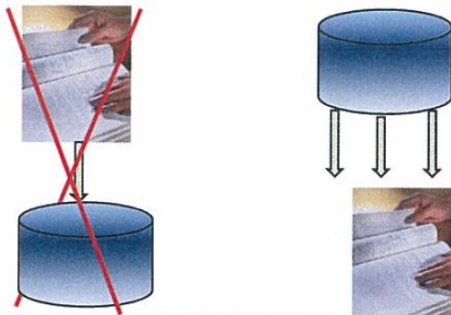
- Table TITLE
- Variable, VALUES, CODES



Data to the file



Production: from database to publication



Standardize metadata

- Make sure *Subject areas* and *subject codes* are COMMON and FOLLOWED in all tables
- Example:
 - "Population" code: 01
 - "Foreign Trade" code 02

Annex 5 – Transforming the KAS Excel file with CPI data into a PX-file

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1														
2		2002	2002	2002	2002	2002	2002	2002	2002	2002	2003	2003	2003	2003
3		May	June	July	August	September	Oktober	November	December	January	February	Mars	April	May
4	COICOP													
5	01-12	100	98,4	96,9	96,8	98,6	100,2	100,6	101,4	102,0	101,4	102,6	101,7	100,2
6	01	100	97,1	94,2	93,4	96,1	97,4	98,4	99,9	100,7	100,0	101,5	101,6	99,6
7	01.1	100	96,8	93,6	92,7	95,7	97,1	98,3	99,9	100,8	99,9	101,6	101,7	99,4
8	01.1.1	100	98,8	99,1	97,8	97,2	97,3	97,8	96,5	95,2	93,5	97,3	100,9	101,7
9	01.1.2	100	100,8	101,5	101,0	101,9	101,9	101,4	101,5	102,8	101,5	102,7	102,0	102,4
10	01.1.3	100	100,0	100,2	100,2	99,9	99,9	106,1	106,1	104,3	102,9	102,9	102,9	102,9
11	01.1.4	100	99,8	99,7	100,3	100,4	102,7	102,7	102,9	101,0	97,9	98,2	97,1	95,9
12	01.1.5	100	106,3	106,5	107,9	106,0	109,4	107,5	107,5	109,2	107,2	106,6	106,6	106,1
13	01.1.6	100	109,0	105,0	104,3	102,3	91,7	86,4	83,6	85,7	85,2	84,6	87,9	90,3
14	01.1.7	100	76,7	57,6	53,0	72,0	77,7	86,8	98,4	106,3	111,3	115,8	113,7	99,5
15	01.1.8	100	100,5	100,4	100,6	100,4	101,2	101,2	101,2	100,7	99,4	99,0	98,5	99,9
16	01.1.9	100	101,0	102,9	103,3	102,8	104,0	103,9	102,7	102,7	98,4	99,3	99,6	99,3
17	01.2	100	100,6	100,7	101,6	100,7	100,9	99,3	99,5	100,2	100,2	100,6	100,6	101,0
18	01.2.1	100	99,8	98,8	100,4	99,1	99,1	97,7	97,7	97,7	98,1	97,6	98,1	98,1
19	01.2.2	100	101,3	102,1	102,5	101,9	102,2	100,5	100,8	100,8	101,8	102,1	102,5	103,1
20	02	100	99,7	100,3	100,6	101,6	101,8	101,7	101,9	102,4	102,7	103,0	103,0	103,2
21	02.1	100	98,7	101,4	103,2	103,0	103,7	103,0	104,0	104,0	103,3	104,6	104,7	105,9
22	02.1.1	100	99,1	103,3	105,3	104,9	105,7	104,6	104,6	104,6	103,0	103,9	103,9	104,4
23	02.1.2	100	96,1	96,1	96,1	96,1	97,2	97,2	97,2	97,2	99,2	98,3	99,0	102,0
24	02.1.3	100	100,0	100,0	103,2	103,2	103,2	103,2	108,6	108,6	108,6	113,2	113,2	115,2

The Excel file from KAS on CPI looks like the example above. It's called kas_cpi_1.

In column A there is the commodities according to the COICOP classification. There is only the position numbers or the codes for the information. This is not very user friendly so for production the texts should be added as users have no way of knowing that 01.1.2 is Beef.

In row 2 and 3 we have year and month. For dissemination databases it's preferred to have only one variable containing time. If not it's very difficult to make a time series and a nice graphical presentation. So the first step in excel is to create a new row with a date format put together by the two rows. (This will usually be done by concatenation in excel).

ADVICE

A common standard for handling / presenting time should be decided and used for all tables published by KAS. A standard could be like 2014M01, 2014M02,.... , 2014M12 for MONTHS, 2014Q1, 2014Q2 for Quarterly data and 2014 for yearly data. When avoiding the names of the months you will be sure not to have any sorting problems.

For the example I have added the COICOP texts taken from the Statistics Denmark website. The Danish texts are included as dst_cpi_1. Please note that KAS is not publishing on all levels in COICOP so the Danish excel file has more positions – price indexes.

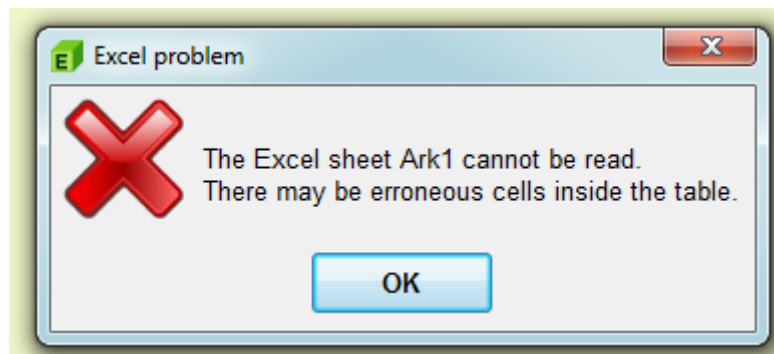
Having added the text and the new date row- the content is copied to a new excel file. Here it is inserted as values and not as formulas in order to delete the rows with month and year.

This file is called kas_cpi_2.

The screenshot shows a Microsoft Excel spreadsheet titled 'Mappe2 - Microsoft Excel'. The formula bar at the top displays '#DIV/0!'. The spreadsheet contains a table with columns labeled DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI. The rows are numbered 118 through 141. The data in the table consists of numerical values, with some cells containing the error message '#DIV/0!'. The bottom status bar shows 'Klar' and 'Ark1'.

In the new file and in the original file from KAS with CPI there are a number of cells where there is a division with zero. Such formula errors make PX-Edit crash. So these have to be deleted before the file can be read by PX-EDIT.

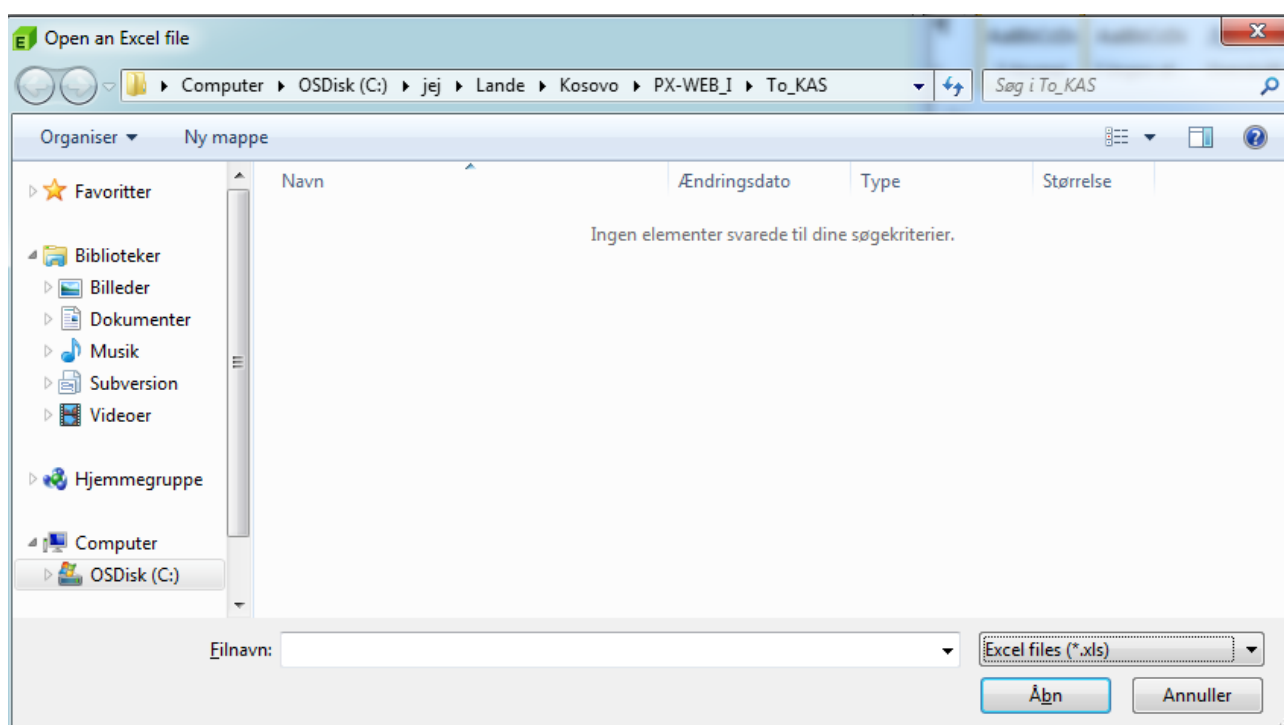
Error message from PX-Edit when errors in cells.



The Excel file is then ready to be put into PX-Edit.

ADVICE

PX-Edit assumes xls files so if you save as xlsx you need to change the file "filter" at the lower right corner. You can consult the PX-Edit documentation to see how the default can be changed.



As the excel file now has both codes and text for COICOP - PX-edit generates an error telling me that the text “NOT in Danish” is used more than once. As we have both codes and values this is NOT a real problem. Although it should be changed – Had we only used values for the COICOP variable PX-Edit would not have been able to see the difference and we would have had a problem.

We are now ready to fill out the required meta-data. See the PX-Edit documentation for details on how the software works.

CTRL-M or Edit-> Metadata opens a new window. The meta data window have metadata at the level of the file and at the level of variables inside the file. Some of the metadata i.e PC-AXIS keywords are mandatory and must be filled out. If they are not the file is not valid and can not be read by PX-Web.

Mandatory key words are shown in read. But PX-Edit can be configured so other keywords must be filled out. See the documentation for how to configure PX-Edit. The default configuration follows the dissemination policy / practices of Statistics Finland (The configuration / ini file can be changed to reflect KAS needs as soon as these are defined).

Description of the keywords found in PX-file

A technical description of all keywords in the PX-file is found on the www.scb.se/pc-axis website. In this paper the keywords are described shortly from a dissemination perspective.

Keywords at table level

The keywords below applies at the table level.

AXIS version

Use 2013 as value – but is in reality not use. But should be added to ensure that the file is correctly formatted.

Language

Default language of the file. Should be according to two character ISO standard (ISO-???) - A formal decision / discussion is need to make a decision for which language code that is appropriate for KAS. In this case the language code is set to SQ – for Albanian. See the list of available codes in PX-Edit.

Languages

Secondary languages found in the file. In this case I have added EN for English.

CreationDate

Date the file is created. Most relevant for files extracted from metadata model. Should be set to the date when the data in file is published / released for the first time.

Next-Update

Next planned update for the data- self explanatory.

PX-Server

Not necessary – but I suggest that you add a standard text to be decided on

Directory-Path

Not necessary - Ignore

Update Frequency

Frequency / periodicity of the table. Establish a naming convention so that Monthly, Quarterly, or Yearly is always written the same way.

TableId

ID of the table – should be unique but is not mandatory

Synonyms

Support for search engine in PX-WEB. You can add descriptive words that users would like to search

for but that are not found in the variable names or the variable values. In a table on CPI the obvious synonym is Inflation and / price changes.

Decimals

The number of decimals stored in the file. Will be automatically determined by PX-Edit when the file is created from an Excel file.

ShowDecimals

The number of decimals that are shown to the users. In principle the statisticians should deliver the data with the number of decimals that they want to show / present to the users.

Rounding

See the PX-Edit documentation – But can assume the values 0 or 1.

Matrix

Should equal the name of the file. Establish a naming convention.

Aggregation allowed

Aggregation allowed or not. Affects PX-Web user interface. Users should not be allowed to aggregated index data – like CPI.

Subject Code

Establish naming convention to be used consistently by KAS. Unique code identifying the subject area.

Subject Area

Title of the statistical “subject area” that the table belongs to. Establish a list of Subject area(s) and subject codes. It is important that the subject areas are used consistent in publications, databases, metadata and other KAS communications. As mentioned during the first activity the list should be approved by the senior management.

Copyright

Can be Yes or No. If Yes is copyright refers to organization named under the SOURCE keyword.

Description

Used to describe the table in the subject area depending on DESCRIPTIONDEFAULT. Relates also to TITLE

Title

Is not needed if DESCRIPTION is filled out. Will be generated on basis of the variable is Description is left out.

Title is often automatically generated by PX-Edit based on the name of variables and the headline of the Excel file.

Description Default

Can be either YES or NO. Play with it so you can see what happens when you make changes.

Units

The unit that the table is counting in. Please establish a naming convention to be used consistently through out KAS. This could be Thousands, Index, Tons, Kilos....

ContVariable

Indicates that the table has more than one contents. Relates to Units. If more than one unit is used in the table a variable should be dedicated to show the values of Units used

Last-updated

Not needed. Mainly related to manipulations in PC-Axis.

STOCKFA

Indicates is data is S(tock),F(low),A(average) – Often used with ContVariable

CFPRICES

Indicates if data is in (C)onstant or F(ixed) prices

DAYADJ

If data is adjusted for working days or not. Default is NO. But properly not relevant.

SEASADJ

If data is seasonally adjusted or NOT. Default is NO.

Contact

contact information for person / or office responsible for this particular table. Again use a naming convention for KAS. Alternatively generic email addresses and telephone numbers that refers to a section / division and not a particular employee.

Refperiod

The exact period for the figures in the table. A naming conventions should be established.

Baseperiod

Is shown in footnote. Used to defined the base period of index fx 2000 equals 100

Database

Name of the database that the data / statics is retrieved from.

Source

Name of the organization producing the Statistics- a default can be defined in PX-Edit – alternatively establish a naming convention to ensure that it is written in a uniform way.

INFO

Information that can be store in the file. Is displayed in PX-Web but not PC-AXIS:

INFOFILE

Name of file with addition information about the statistics- the file must be placed in the same folder / directory as the PX-table.

NOTEX

Mandatory footnote – is displayed before the use can see any figures. A way of marking something that's absolutely necessary.

NOTE

Is shown after selection. Information text stored at the table level. NOTE, NOTEX is also available at the variable and variable value level.

Keywords at the variable level

Having filled out the metadata at the table level – you can fill out the metadata related to the variables. None of the keywords at the variable level are mandatory so PX-Web will work even if you don't fill them out.

The screenshot shows the PX-Web interface for editing metadata. The title bar reads "[1] Consumer Price Index Kosovo by COICOP and Time". The "Variable:" dropdown is set to "COICOP". Below this is a toolbar with buttons: "Keywords", "Meta part", "View", "Select", "Sort", "Edit", "Add", and "Anonymize". The main area is a table with three columns: "keyword", "COICOP", and "Time". The rows are categorized into "Table", "Variables", "Values", and "Cellnotes".

	keyword	COICOP	Time
Table	TIMEVAL		
Variables	DOUBLECOLUMN		
	DOMAIN		
	VARIABLE-TYPE		
Values	HIERARCHIES		
	MAP		
	ELIMINATION		
Cellnotes	NOTEX		
	NOTE		

TIMEVAL

See the documentation for a detailed description. Applies to the variable containing time.- Timeval is required to support conversion of data into AREMOS / Gesme /Ecoser format. In the short to medium term for this project it is not relevant to fill out this information.

DOUBLECOLUMN

Can be Yes or No. Has only effect on the screen if users chooses the MATRIX format for output. Is used to separate values and codes. Can be ignored for our purpose.

DOMAIN

Determines which value sets and therefore which aggregation lists that can be used together with the file. Is not strictly needed for our purpose. But a domain should be established for each subject area.

VARIABLE-TYPE

Can be ignored. Is not shown in PC-axis.

HIERARCHIES

Defines hierarchies for the variable. Difficult to explain –we will create an example at a later stage.

MAP

References to MAP that can present data related to the variable. Example will be given at later stage when we have data suitable for presentations on MAP.

ELIMINATION

Users are required to select at least one value for a variable. But ELIMINATION can be used to pre select a value. In principle any value can be used as the default selection but in this case it makes sense to select the overall CPI as default. Elimination can also be set to YES. If elimination is set to YES PX-EDIT will aggregated all values in to a total.

Warning: If you have sun totals in a table setting ELIMINATION = YES will create a TOTAL that is too big.

NOTEX

Mandatory footnote related to the specific variable.

NOTE

Note related to the variable.

Metadata related to the variable values

Like the metadata related to the variable – it is not necessary to set any metadata for the values.

[1] Consumer Price Index Kosovo by COICOP and Time

Variable: COICOP en

Keywords Meta part View Select Sort Edit Add Anonymize

	value	PRECISION	VALUENOTEX	VALUENOTE
CPI				
01. Food and non-alcoholic beverages				
01.1 Food				
01.1.1 Bread and cereals				
01.1.2 Meat				
01.1.3 Fish				
01.1.4 Milk, cheese and eggs				
01.1.5 Oils and fats				
01.1.6 Fruit				
01.1.7 Vegetables				
01.1.8 Sugar, jam, honey, chocolate and confectionary				
01.1.9 Food products n.e.c.				
01.2 non-alcoholic beverages				
01.2.1 Coffee, tea and cocoa				
01.2.2 Mineral waters, soft drinks, fruit and vegetable juices				
02. Alcoholic beverages, tobacco				
02.1 Alcoholic beverages				
02.1.1 Spirits				
02.1.2 Wine				

133 PRECISION Set.. Defaults Import..

PRECISION

Makes it possible to show single values with more decimals than specified in the SHOWDECIMALS Keyword.

VALUENOTEX

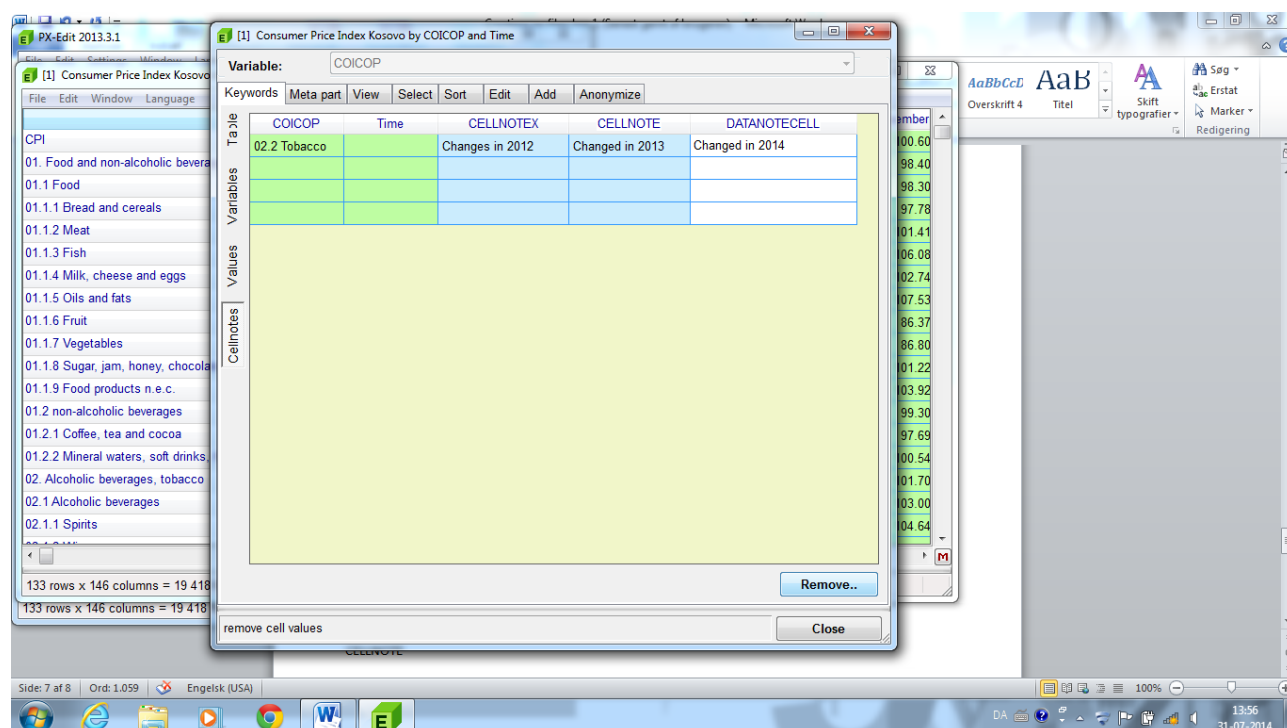
Same as at the table / variable level –now just related to the specific vale.

VALUENOTE

Same as at the table / variable level –now just related to the specific vale.

Metadata at the cell level

Also at the cell level – (specific combinations of variable – values) different types of notes can be specified.

**CELLNOTEX**

Mandatory information at the cell level – shown before selection

CELLNOTE

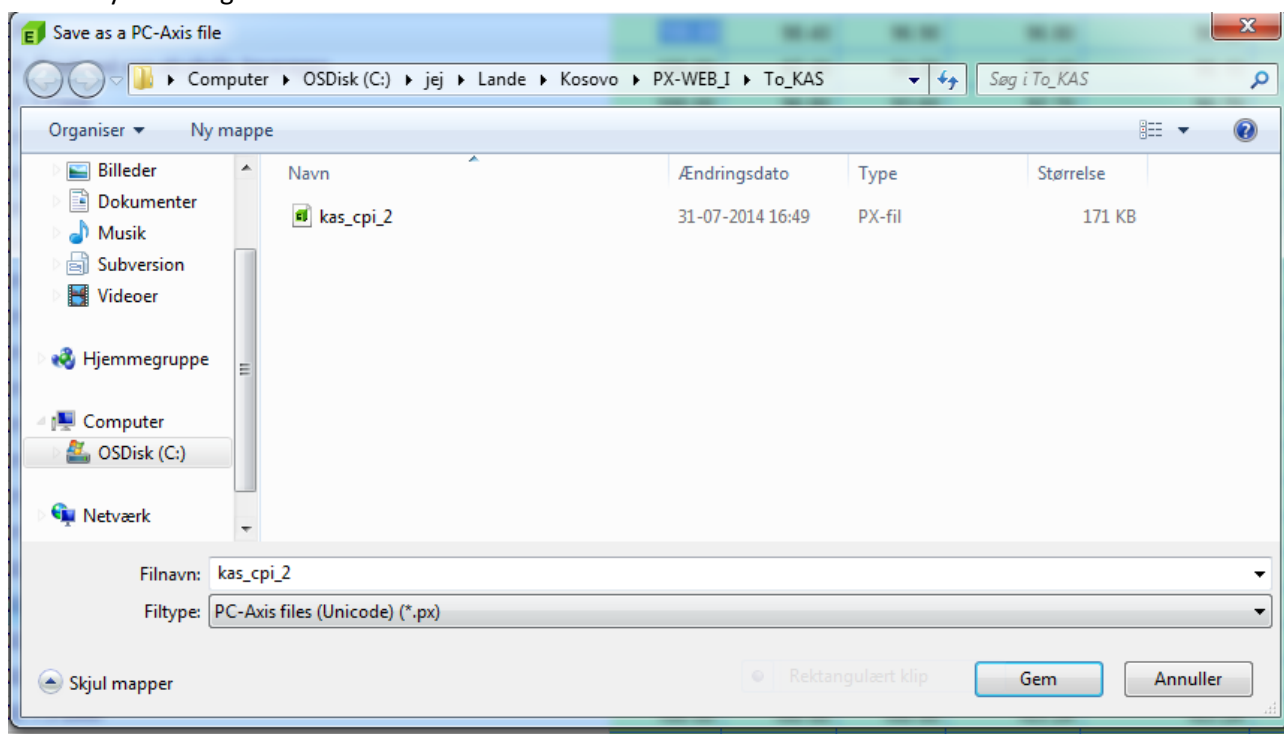
Information at the cell level

DATANOTECELL**Save the PX-File**

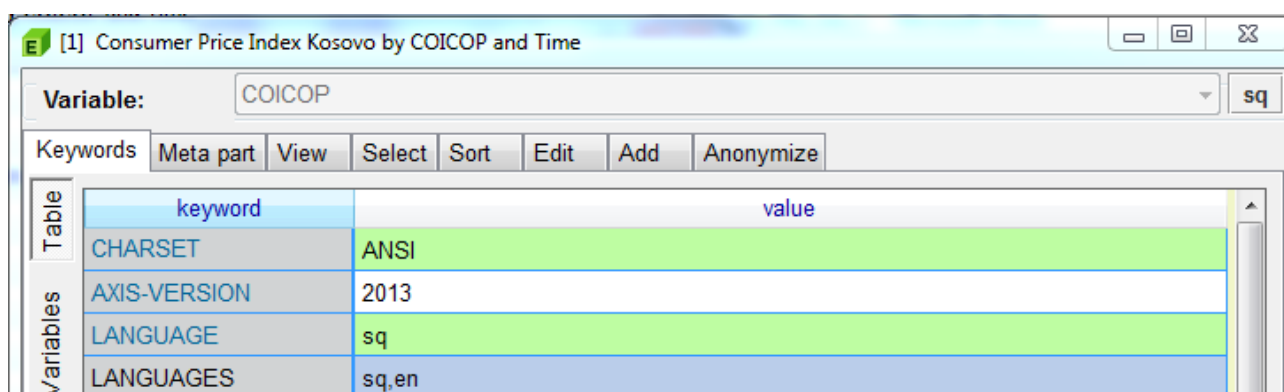
When all the required / necessary keywords are filled in –we are ready to save the file. The file is saved at KAS_CPI_1.PX

It is recommended to save the file in UNICODE as this is the best way to present the different characters associated with the Albanian alphabet.

As there is overlap between the variable values in our file –we will get warnings for these. But in this case they can be ignored.



When defining the metadata at the table level we defined a primary and secondary language in the file. (Albanian and English) As we have not made any changes to the metadata the content of the two languages is the same. You can change between the languages by clicking on the language in the upper right corner of PX-Edit.



By clicking on the Edit tab you can change the variable names / values.

[1] Consumer Price Index Kosovo by COICOP and Time

Variable: en

Keywords Meta part View Select Sort Edit Add Anonymize


Variable:

text [121]	code [133]
CPI -EN	01-12
01. Food and non-alcoholic beverages EN	01
01.1 Food - EN	01.1
01.1.1 Bread and cereals - EN	01.1.1
01.1.2 Meat - EN	01.1.2
01.1.3 Fish - EN	01.1.3
01.1.4 Milk, cheese and eggs - EN	01.1.4
01.1.5 Oils and fats	01.1.5
01.1.6 Fruit	01.1.6
01.1.7 Vegetables	01.1.7
01.1.8 Sugar, jam, honey, chocolate and co...	01.1.8
01.1.9 Food products n.e.c.	01.1.9
01.2 non-alcoholic beverages	01.2
01.2.1 Coffee, tea and cocoa	01.2.1
01.2.2 Mineral waters, soft drinks, fruit and v...	01.2.2
02. Alcoholic beverages, tobacco	02
02.1 Alcoholic beverages	02.1
02.1.1 Spirits	02.1.1
02.1.2 Wine	02.1.2

1 / 133

Select..

☒ all
☐ selected
☐ repeated
☐ Allow duplicates



OK

Reset

Close

Remember to click on OK before your Click close. Again Save the table.
 The file is now complete.

Add PX file to PX-WEB

When you have created a PX-File it should be placed on the server containing PX-Web. In general refer to the PX-Web documentation for how to install and operate PX-Web. Below is a short description of the necessary steps to present the file that we have just created.

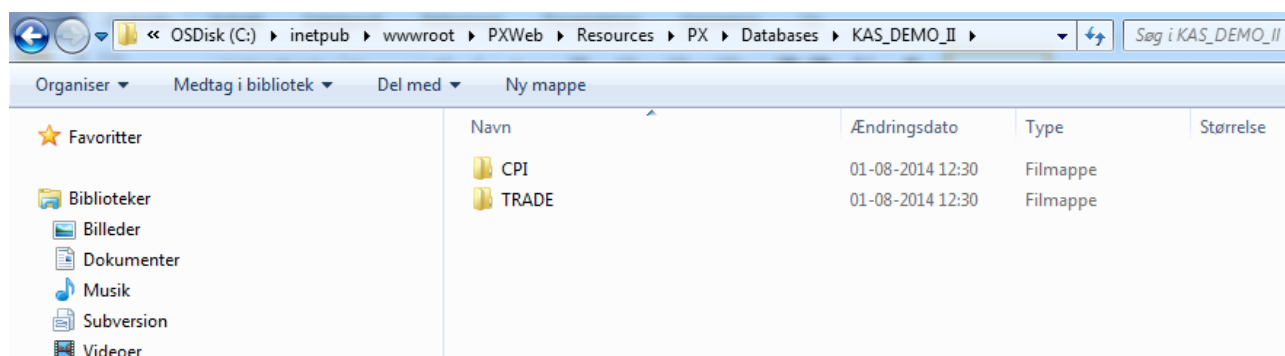
In a standard set up of PX-Web the files are located in
 C:\inetpub\wwwroot\PXWeb\Resources\PX\Databases

For each "database" you will need to create a master folder. In this case I call the master folder KAS_DEMO_II.

In this w can / must create a folder for each subject area that we would like to share with our users.

I create two folders in C:\inetpub\wwwroot\PXWeb\Resources\PX\Databases\KAS_DEMO_II A folder called CPI and a folder called TRADE.

So it looks like this:



The file we have just created should be placed in the CPI folder.

Now we must tell PX-Web that a new database has been added. This is done by generating a navigation file for each of the folders in

C:\inetpub\wwwroot\PXWeb\Resources\PX\Databases\KAS_DEMO_II

The administration interface is in <http://localhost//pxweb/admin> When installing the standard rights blocks this address so you may have to use <http://127.0.0.1/pxweb/admin> instead-

Tools -> Generate Database ->

PX-WEB ADMINISTRATION Log out English

HOME SETTINGS **TOOLS** FEATURES

GENERATE DATABASE LANGUAGE MANAGER RESET CHANGE PASSWORD

GENERATE DATABASE

Generate PX database: KAS_DEMO_II

Language dependent: No

Sort order: File name

☒ Create search index

Generate

Until you have multiple language files and a full translation of user interface Language dependent should be selected as NO.

PX-WEB ADMINISTRATION Log out English

HOME SETTINGS **TOOLS** FEATURES

GENERATE DATABASE LANGUAGE MANAGER RESET CHANGE PASSWORD

GENERATE DATABASE

Generate PX database KAS_DEMO_II

Language dependent No

Sort order File name

☒ Create search index

Information	Menu build started 01-08-2014 13:38:28
Information	Menu build ended 01-08-2014 13:38:28

Search index creation has been initiated

If the PX-files are correctly made you will get a message like above. If you get an error message on or more PX-files contains errors.

When the “navigation files” are generated you must also enable the new folder for viewing. This you only have to do when you add a new database for the first time.

Settings-> Databases -> and then check KAS_DEMO_II

PX-WEB ADMINISTRATION Log out English

HOME **SETTINGS** TOOLS FEATURES

GENERAL MENU SELECTION PRESENTATION NAVIGATION Save

SITE
LANGUAGE
PATHS
FILE FORMATS
GLOBAL
DATABASES
ADMINISTRATION

PX Databases

Enabled	Db created	Index status	Action
<input type="checkbox"/> Demo	7/8/2014	7/7/2014	Create index
<input checked="" type="checkbox"/> DST_DATA	7/9/2014	7/8/2014	Create index
<input checked="" type="checkbox"/> KAS_Demo	7/9/2014	7/7/2014	Create index
<input type="checkbox"/> KAS_DEMO_II			
<input checked="" type="checkbox"/> Shkollat	7/9/2014	7/9/2014	Create index

CNMM (Common Nordic Meta Model) Databases

Enabled	Index status	Action
<input checked="" type="checkbox"/> PX-Web	7/7/2014	Create index
<input type="checkbox"/> --DBID--		Create index

With a bit of luck you should now have a screen that looks like below.



PX-Web 2014 May R1

English

[1 Choose table](#)
[2 Choose variable](#)
[3 Show table](#)

KAS_DEMO_II

Search in KAS_DEMO_II:

CPI
 Consumer Price Index Kosovo

As the folder TRADE is empty it is not displayed before we add a PX file to the folder.

Changing the name of the folder

A feature NOT documented in the PX-Web documentation is alias.txt – If we instead of CPI would like to see the title: “Consumer Price Index” the trick is to create a file (plain text) called alias.txt – In this you write the text that you would like PX-Web to display. Working multiple languages you will have one alias file for each language. Here the form is alias_en.txt for English alias_sq.txt for Albanian. The XX must follow the language codes from the language file. The language file is located in C:\inetpub\wwwroot\PXWeb\Resources\Languages

Example of file with trade data

From KAS we got two excel files with import and export data from Kosovo. The files are called: kas_export and kas_import. They look like this:

	A	B	C	D	E	F	G	H	I
1	EXPORT BY COUNTRIES (2005-2011)								
2	Time	2005	2006	2007	2008	2009	2010	2011	2011/2010
3	Country								
4	Austria	1.017	1.211	2.005	2.072	1.978	5.670	5.711	101
5	Belgjika	19	17	5.587	28.113	5.176	11.455	5.085	44
6	Britania e Madhe	72	62	154	173	249	681	1.343	197
7	Danimarka	142	44	94	53	75	44	52	118
8	Franca	515	232	145	247	639	1.084	1.305	120
9	Gjermania	5.965	3.952	16.190	7.205	7.563	15.587	24.144	155
10	Greqia	5.522	3.914	8.400	10.851	240	222	194	87
11	Holanda	124	1.128	2.413	1.888	1.506	1.018	2.923	287
12	Hungaria	92	18	112	105	396	29	89	307
13	Irlanda	3	20	48	10	3	6	7	117
14	Italia	5.668	12.654	9.672	25.485	46.218	80.193	83.924	105
15	Luksemburg							8	

The files with import and export figures for Kosovo can more or less be directly imported / read by PX-Edit. You should consult the PX-Edit documentation on how to read / import PX-files. In the example above – attention should be given to the empty cells B3..I3. The empty cells helps PX-edit

know the difference between column and row variables. Especially the Power point Presentation on structural files is relevant.

You can download the documentation from

http://tilastokeskus.fi/tup/pcaxis/lataus_tyokalut_en.html



Example 1

Marriages 1975-2001							table title
Year		1975		...			column variables
Age		15-19	20-24	25-29	30-34	35-39 ...	
Municipality	Sex						
Total	men	1352	14793	10367	2503	1037 ...	
	women	5693	15794	6704	1583	812	
Alahärmä	men	1	11	9	0	1	
	women	5	17	5	1	1	
Alajärvi	men	2	24	15	0	2	
	women	19	14	8	1	2	
Alastaro	men	2	10	14	3	0	
	women	4	17	6	1	1	
Alavieska	men	0	14	10	2	0	
	women	6	13	5	2	1	
Alavus	men	2	25	9	7	0	
	women	18	26	8	1	0	
Anjalankoski	men	3	53	39	6	6	
...					
row variables							data part

In our opinion it is better to have one file with both import and export. This means that users can compare import and export from Z country over time just by looking at one file. Also the raw trade difference can then be directly seen. It is therefore suggested that the two excel files are merged into a new file. This means that we will have to add a new variable with two values (Import / Export).

	A	B	C	D	E	F	G	H	I	J
1	Import and Exports									
2	Time		2005	2006	2007	2008	2009	2010	2011	2011/2010
3	Import / E	Country								
4	Export	Austria	1.017	1.211	2.005	2.072	1.978	5.670	5.711	101
5	Export	Belgijka	19	17	5.587	28.113	5.176	11.455	5.085	44
6	Export	Britania e Madhe	72	62	154	173	249	681	1.343	197
7	Export	Danimarka	142	44	94	53	75	44	52	118
8	Export	Franca	515	232	145	247	639	1.084	1.305	120

39	Export	Të tjera	2.847	8.198	12.560	32.214	21.660	52.495	45.470	87
40	Export	GJITHSEJ*	56.283	110.774	165.112	198.463	165.328	295.957	319.165	108
41	Import	Austria	20.719	23.539	26.842	30.953	38.886	33.126	38.669	116,7
42	Import	Belgjika	4.646	4.734	6.012	7.223	6.105	6.394	8.656	135,4
43	Import	Britania e Madhe	7.478	6.378	9.502	12.580	14.133	13.457	17.084	127,0
44	Import	Danimarka	1.730	1.806	3.751	6.194	3.413	2.624	3.545	135,1

The new variable is added as a column variable. If there is a country that Kosovo only exports to or imports from it is not a problem. The import / export will just be shown as a missing value. However if there is a spelling error / difference in the country name the country will appear twice. The excel file with both import and export is saved as kas_export_import_merged.


When you read it in PX-Edit it will look like this

[1] Import and Exports by Import / Export, Country and Time									
		2005	2006	2007	2008	2009	2010	2011	2011/2010
Export	Polonia	102.00	281.00	121.00	102.00	53.00	150.00	650.00	433.33
	Republika Çeke	1.00	356.00	159.00	1127.00	463.00	297.00	168.00	56.57
	Sillovakia	34.00	37.00	395.00	241.00	391.00	920.00	2405.00	261.41
	Silovenia	1231.00	4515.00	4290.00	6304.00	2882.00	6203.00	6001.00	96.74
	Spanja	..	49.00	114.00	196.00	51.00	49.00	57.00	116.33
	Suedia	18.00	43.00	8155.00	4390.00	322.00	1116.00	365.00	32.71
	Romania	1142.00	43.00	232.00	272.00	987.00	362.87

As in the CPI example you will now have to fill out the metadata for table. See the CPI description for how to do this. As the data contains rows with totals for import / export and 2 EU aggregations – aggregation should not be allowed.

The file is then saved as kas_export_import_merged.px – Remember to save as UNICODE. When the file is saved copy it to C:\inetpub\wwwroot\PXWeb\Resources\PX\Databases\KAS_DEMO_II\TRADE

Then update PX-Web so that the file is now visible. It should now look like this



PX-Web 2014 May R1

English

>> KAS Demonstration Database 2014

1

2

3

Choose table

Choose variable

Show table

KAS Demonstration Database 2014

Search in KAS Demonstration Database 2014:

Consumer Price Index - Kosovo

TRADE

Import and Exports

Selecting from the table we can now generate a graph like this:



Users interested in trade between Kosovo and Denmark can now consult a single table and do not have to select the data from two different table.