SCHWEIZERISCHE NATIONALBANK
BANQUE NATIONALE SUISSE
BANCA NAZIONALE SVIZZERA
BANCA NAZIUNALA SVIZRA
SWISS NATIONAL BANK ✛

Zurich, 31 March 2023

Statistics

Guide to creating CSV reports

Contents   **Page**

1. Purpose of this document

This document is aimed at companies that are required to report data for surveys conducted in web table format via the eSurvey online reporting portal. Companies may either enter these data in the web tables or upload them in a CSV or XML file. The following explanations contain, in particular, guidance on how to handle CSV files, and the information may also be useful in helping companies choose the most suitable delivery format.

2. Content-related considerations as preparation

The first survey to be changed over to the new format will be the revised current account survey (as of reference date 31 March 2023). Changes to the content will also come into effect at this time.

2.1. What content has to be reported?

The first step is to determine the survey content positions for which data must be provided. Information in this regard can be found in the survey content in the web tables as well as in the *Notes to the current account survey CAS*.

Quick links	
Survey and survey content:	CAS web tables in eSurvey
Notes on survey content:	Notes to the current account survey CAS

2.2. Is the survey content the same as in the old CA surveys?

Companies that were already submitting data for a previous current account survey can check which positions from earlier CA survey reports (CABQ, CAGQ, CAIQ, CATQ) can be continued or have to be changed, and which need to be added or removed.

Quick links	
Overview of changes in the migration from CAXQ to CAS surveys:	Reconciliating the new CAS survey with the previous CAGQ, CABQ, CAIQ and CATQ surveys and vice versa

SNB BNS ✚

Fig. 1: Using the overview of changes in the migration from CAXQ to CAS surveys

1	Select the worksheet with the **previous report** (CAGQ in the example)
2	Name and number of the **component** in the **previous report**
3	Name and number of the component in the future (CAS) report. The **names and numbers** of the components are usually **part of the title of the CAS web table**
4	Summary of **most important changes**

3. Criteria for choosing the most suitable delivery format

3.1. What delivery formats are available?

The data can be prepared and transmitted using three different delivery formats:

- **Web tables**: The data can be entered in the web tables manually or can be copied and pasted.

- **CSV file**: A CSV file is available for creating the report locally / offline. Here the full or previously adapted survey content is downloaded in CSV format. The CSV file can be opened in Excel and linked with internal Excel sources. Uploading a CSV file allows the data to be displayed in the web tables, edited where necessary, checked for consistency and finally submitted.

- **XML file**: The reporting process can be automated using the XML format. This format is only available for the full survey content, i.e. a delivery must always contain the entire survey content and cannot be tailored in advance to the parts that are relevant for a given company. Uploading an XML file allows the data to be displayed in the web tables, edited where necessary, checked for consistency and finally submitted.

Quick links	
Overview of delivery formats:	[Help with delivery formats](#)

3.2. What is the most suitable delivery format?

The following points can be considered when deciding on a delivery format:

- **Web tables**: Smaller data volumes. Conditions: Linking to internal source files not necessary or not possible. Processing of report by multiple people. Copying the web tables into an Excel file for internal processing and then copying the data back from the Excel file into the web tables offers adequate functionality to supply the data efficiently.

- **CSV file**: Typically for large, complex reports. Conditions: Linking with internal source files is sensible and feasible. Users are already familiar with CSV format and Excel functionality.
  There are two types of CSV file

    o CSV file with full survey content: For companies that have to report data on most positions and/or for companies whose reportable positions vary over time. Here it makes sense to download the entire survey content once in a complete CSV file and to link it fully with internal source files.

    o CSV files with tailored survey content: For companies that have large amounts of data to deliver, but can exclude certain positions reliably and consistently over time.

- **XML file**: Large, complex reports. Conditions: Implementation of an automatically generated XML file from internal data sources is possible.

4. Downloading CSV files

If the decision has been taken to prepare and submit the data in CSV format, sections 4 to 12 below offer guidance on how to handle CSV files.

4.1. How can the CSV file be downloaded?

A CSV file with full or tailored survey content can be downloaded in eSurvey.

Quick links	
Downloading a full CSV file	Help with eSurvey, [7.7.2.1. Exporting the full, blank survey in CSV format](#)
Downloading a CSV file with tailored content	Help with eSurvey, [7.7.2.2. Exporting the blank CSV file after adapting the survey content](#)

4.2. Should 'Questions on your company' be completed in the web table before downloading the CSV file?

For both the full and the tailored CSV file, we recommend that you start with a blank report in the web tables and answer 'Questions on your company' in the web tables before downloading the CSV file. If a full CSV file with the complete survey content is desired, unlike with the tailored CSV file, no selection should be made under 'Select components'.

Quick links	
Starting a report:	Help with eSurvey, 7.5. Testing reports (for web tables)
Manual reporting:	Help with eSurvey, 7.7. Workflow

4.3. What should be done if 'Questions on your company' was not completed in the web table before downloading the CSV file?

If you choose not to complete 'Questions on your company' in advance and you download a completely blank CSV file, it is essential that the questions be answered in the CSV file. The relevant values should be entered under '#Questions (mandatory)'. More information on the sections in the CSV file can be found in *6. Layout and structure of the* CSV file.

Quick links	
Answering 'Questions on your company' in the CSV file	Help with delivery formats, 4.1.4.7. Special features Current account survey (CAS): Questions on your company

5. General guidance on handling CSV files

5.1. What do I have to consider regarding the CSV format if I do not use Excel in Windows?

The following format must be adhered to when processing the CSV:

- Character set encoding:

  - Windows-1252 or ISO-8859-1 (Western Europe) for Windows or Linux

  - UTF8 for MacOS or Linux

- The column separator is a semicolon (;)

- If the column separator (;) is contained in a value ('Value' column), the value must be placed in inverted commas (").

- For the import into eTable, at least the 'Position' column (position key) and the 'Value' column (observation/question value) must be present.

5.2. How can the CSV file be opened?

5.2.1. Regional format is set to German (Switzerland)

Once the survey content has been downloaded as a CSV file, the document can be opened and edited in Excel. This file can be saved either as a CSV file (*.csv) or as an Excel file (*.xlsx). NB: The upload of the data to the web tables must be in the form of a CSV file. Instructions on saving can be found in *10. Saving CSV files*.

5.2.2. Regional format is not set to German (Switzerland)

If your PC's operating system is not set to the regional format German (Switzerland), you can change it, e.g. under 'Settings' in Windows.

If you cannot or are not allowed to adjust the regional settings on your Windows PC, you can import the CSV directly into Excel.

Quick links	
Changing regional settings in Windows	Help with delivery formats, 4.1.4.3 Changing a document's regional settings in Windows
Importing the CSV file into Excel	Help with delivery formats, 4.1.4.4 Opening the CSV file in Excel without changing the regional settings in Windows

5.3. In what format must the numbers be entered?

The figures in the CSV file must be in Swiss format ([decimal separator: point], [optional: thousands separator: inverted comma, e.g.: 10'000'000.00]). If a different format is set by default in Excel, after opening the CSV file the format must be changed under advanced options so that the decimal separator is a point and the thousands separator is an inverted comma. When entering data, it is also important to note in which unit the value is to be entered in the relevant survey (in CHF millions or CHF thousands).

5.4. How can the CSV file be optimally arranged?

To make editing easier, once the CSV file has been opened in Excel, the column widths can be adjusted so that all entries can be read. Furthermore, Excel's filtering and sorting functions can be used in the document. A description of how to deploy these functions can be found in *7. How can I get a better overview of the survey content?*

Quick links	
Handling CSV files:	Part 4, video 'Complete tables / Using CSV files'

6. Layout and structure of the CSV file

6.1. How are CSV files structured?

The CSV file is structured according to sections and columns. The order of the sections and columns, as well as their names and headings, may not be changed.

Fig. 2: Structure of the CSV file with sections and columns

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Position	Value	Type	Range	EXT L	Predica	Category	Dimension	Dimension	Dimension	Dimension	Dimension	Dimension
2	# Meta-data												
3	SUBJECT_ID	snbcode	META_DATA				SNB-code						
4	REFER_DATE	01.07.2022	META_DATA				Cut-off-date						
5	REPORT_NAME	CAS	META_DATA				Survey						
6	REPORT_DOMAIN_NAME	G	META_DATA				Survey domain						
7	INFORMATION	https://emi.snb.ch/e	META_DATA				Information						
8	FI_VERSION	1	META_DATA				Version						
9	#												
10	# Questions (mandatory)												
11	CA.KON.ACS{}		ENUM (mandatory) [IFR,USG,SWG,OTH]	Consolidation			On what accounting standard are the reported data based?						
12	CA.KON.KYN{}		ENUM (mandatory) [YES,NO]	Consolidation			Are several relevant companies in the same group domiciled in Switzerland or Liechtenstein? (						
13	CA.KON.KVG{}#GES[1].KONS		ENUM (mandatory) [YES,NO]	Consolidation			Every time you complete the survey, you must enter or update which other relevant companies						
14	CA.KON.KVG{}#GES[1].LOC		STRING (mandatory)	Consolidation			Every time you complete the survey, you must enter or update which other relevant companies						
15	CA.KON.KVG{}#GES[1].NAM		STRING (mandatory)	Consolidation			Every time you complete the survey, you must enter or update which other relevant companies						
16	CA.KON.KVG{}#GES[1].UID_Kons		STRING (mandatory)	Consolidation			Every time you complete the survey, you must enter or update which other relevant companies						
17	CA.KON.KVG{}#GES[2].KONS		ENUM (mandatory) [YES,NO]	Consolidation			Every time you complete the survey, you must enter or update which other relevant companies						
18	CA.KON.KVG{}#GES[2].LOC		STRING (mandatory)	Consolidation			Every time you complete the survey, you must enter or update which other relevant companies						
19	CA.KON.KVG{}#GES[2].NAM		STRING (mandatory)	Consolidation			Every time you complete the survey, you must enter or update which other relevant companies						
20	CA.KON.KVG{}#GES[2].UID_Kons		STRING (mandatory)	Consolidation			Every time you complete the survey, you must enter or update which other relevant companies						
21	#												
22	# Observations												
23	CA.WAH{C,W1,T,T,T,LFP}		DOUBLE	CAS1_Agriculture			1. Purchases	Income	Total non-res	Total intragro	Total mercha	Total includin	1.1 Food, bev
24	CA.WAH{C,W1,T,T,T,TBS}		DOUBLE	CAS1_Textiles			1. Purchases	Income	Total non-res	Total intragro	Total mercha	Total includin	1.2 Textiles, v
25	CA.WAH{C,W1,T,T,T,ENT}		DOUBLE	CAS1_Mining			1. Purchases	Income	Total non-res	Total intragro	Total mercha	Total includin	1.3 Energy so
26	CA.WAH{C,W1,T,T,T,CEE}		DOUBLE	CAS1_Chemicals			1. Purchases	Income	Total non-res	Total intragro	Total mercha	Total includin	1.4.1 Chemic
27	CA.WAH{C,W1,T,T,T,PHE}		DOUBLE	CAS1_Chemicals			1. Purchases	Income	Total non-res	Total intragro	Total mercha	Total includin	1.4.2 Pharma
28	CA.WAH{C,W1,T,T,T,MET}		DOUBLE	CAS1_Metals			1. Purchases	Income	Total non-res	Total intragro	Total mercha	Total includin	1.5.1 Basic m
29	CA.WAH{C,W1,T,T,T,GOL}		DOUBLE	CAS1_Metals			1. Purchases	Income	Total non-res	Total intragro	Total mercha	Total includin	1.5.2 Gold (in
30	CA.WAH{C,W1,T,T,T,CEO}		DOUBLE	CAS1_Machines			1. Purchases	Income	Total non-res	Total intragro	Total mercha	Total includin	1.6.1 Comput
31	CA.WAH{C,W1,T,T,T,ELE}		DOUBLE	CAS1_Machines			1. Purchases	Income	Total non-res	Total intragro	Total mercha	Total includin	1.6.2 Electrica
32	CA.WAH{C,W1,T,T,T,MAE}		DOUBLE	CAS1_Machines			1. Purchases	Income	Total non-res	Total intragro	Total mercha	Total includin	1.6.3 Machine

6.2. What do the different sections (#) in the CSV file mean?

The sections correspond to survey items from the web tables. For a better understanding of the interrelationships, we advise tracking these sections in parallel in the web tables when viewing the CSV file for the first time.

The '#Meta-data' section identifies the report and contains the link to the notes.

The '#Questions (mandatory)' section contains the survey content for 'Questions on your company'.

The '#Observations' section contains the survey content for the 'Tables' and the positions of the survey components.

Quick links	
Relationship between sections in the CSV file and the web tables	Part 4, video 'Complete tables / Using CSV files'
Detailed description of the sections in the CSV file	Help with delivery formats, 4.1.4.5. Sections of CSV file

6.3.   What do the different columns in the CSV file mean?

Depending on the section, the columns contain technical descriptors and subject-specific keys for the survey or they record the values that must be entered by the reporting institution.

The values (observations) for the positions to be reported must be entered in the 'Value' column. The cells may contain a value or a reference to a value.

The 'Range' column shows which web table a given position belongs to. A web table usually corresponds to a group of positions. This column can be used for filtering. This is described below in *7. How can I get a better overview of the survey content?*.

In the 'EXT Link' column, reporting institutions can enter references to their internal data sources. The way this column functions is described in *8. Links to data sources*.

Quick links	
Relationship between sections in the CSV file and the web tables	Part 4, video 'Complete tables / Using CSV files'
Detailed description of the sections in the CSV file	Help with delivery formats, 4.1.4.6. Columns in CSV file

7.   How can I get a better overview of the survey content?

The order of the individual observation positions in the CSV file is set to mirror the structure of the web table as closely as possible.

The usual Excel sorting and filtering functions can be used to get a better overview of the survey content.

We recommend setting the filter function. One of these filters can be applied to the 'Range' column, for example, to only show the survey content pertaining to a specific web table or component. If additional filters are applied to the 'Component' and 'Dimension1-x' columns, the view can be further restricted to individual positions, e.g. countries or totals.

8.   Links to data sources

8.1.   How can the CSV file be linked to internal data sources?

It is possible to link the CSV file with internal data sources using regular Excel functionalities, such as a look-up formula. The links can be entered directly in the 'Value' column. This can be problematic, however, if such references cannot be resolved or updated. The referenced values are taken over during the upload of the CSV file to the web tables. The links themselves are lost in this process. The 'EXT Links' column is specifically intended for storing these links if they are to be retained in the CSV file after uploading and later downloading.

8.2. How does the static link in the 'EXT Links' column work?

Links to source files entered in the column 'EXT_Links' must be prefixed with two inverted commas ("=!Source.xlsx). These links are stored in the system when the CSV file is uploaded and are exported again as links when the CSV file is downloaded again. This is also the case if further components are selected before re-downloading, which adds more keys to the CSV file. This avoids having to re-implement all the links in the CSV file when changes are made to the scope of the survey content.

9. Observations: Identifiers, calculations and number formats

9.1. What are the unique identifiers of a position in the CSV file?

The unique identifiers (keys) in the 'Position' column can be used as references for systematically linking the positions in the CSV file to the corresponding positions in the internal data sources. These keys are based on a subject-specific model.

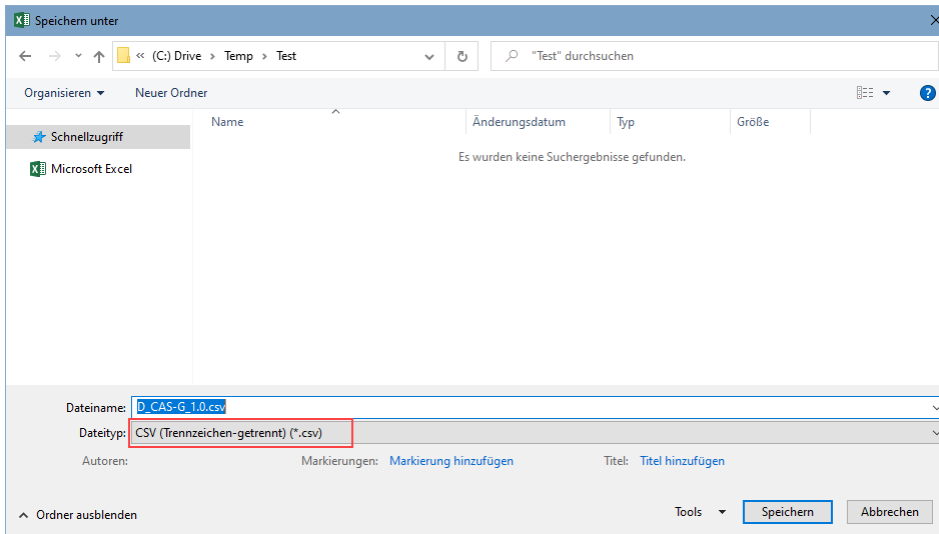| Quick links	
Information on the structure of the keys	Information on the subject-specific model underlying the CAS survey

9.2. Are total positions in the CSV file calculated automatically?

Total positions are not calculated automatically. When completing the CSV file or setting up the corresponding links, the 'Total non-residents' value must also be entered. If this is not done, a consistency error will be flagged up after uploading the CSV file.

10. In what format should a CSV file be saved?

If a copy of the CSV file was created in Excel format for preparing the data, this .xlsx file must be converted back to CSV format before being uploaded to the web tables for data submission. For this, the reporting institution saves its own Excel file as a CSV file. The comma-delimited CSV format should be selected.

Fig. 3: Format when saving a CSV file

Quick links	
Information on the delimited CSV format	Help with delivery formats, [4.1.4.1. Technical specifications of the CSV format](#)

11. Uploading CSV files, visualising the content in the web tables and submitting the report

11.1. How can the CSV file be uploaded to the web tables?

The CSV file can be uploaded by clicking through the following menu items: 'Understanding and testing surveys', 'Actions', 'Test report', 'Use your own XML or CSV file'. The content will then be uploaded to the web tables. Survey data must be submitted in a <u>single</u> CSV file. If a CSV file is uploaded again, the content that has already been transmitted to the web tables will be overwritten.

11.2. How can the data be viewed and checked in the web tables after they have been uploaded?

Once the file has been uploaded, the 'Submit' page appears. Here the data is checked for consistency and any errors and warnings are displayed. Errors and warnings can be viewed, checked and corrected in the individual tables. However, we recommend correcting any errors in your source file and re-uploading the CSV file.

11.3. How can the data be submitted?

Under 'Complete reporting/Submit', the report can be submitted and thus transmitted to the SNB. Consistency errors should be corrected before submitting the report. If there are legitimate reasons why the report is being submitted with errors, or if there are errors which cannot be resolved, an explanation must be added in the comments field before sending.

Quick links	
Uploading the CSV file to the web tables and submitting it as a report	Help with eSurvey, 7.7.2.4. Uploading the CSV file to the web tables

12. How is the data checked for consistency?

The web tables contain consistency checks that verify the arithmetical correctness of the entries. These consistency checks are also applied to data loaded into the web tables via CSV file.

The CSV file itself does not contain any consistency checks. If the reporting institution itself wishes to integrate the survey's consistency rules into the CSV file opened in Excel, these can be viewed or obtained under 'Understanding and testing surveys', 'Actions' and 'Specifications'.

Quick links	
Current consistency rules	CAS consistency rules (all languages)
Description of specifications	Help with eSurvey, 7.4. Specifications