



Data export software



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IZUM

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1 Introduction

In the COBISS3/Reports software module there are various reports available that are used by libraries for day to day operation to prepare various tables and statistical data. These reports are created upon requests from libraries. Creating an individual report is a relatively difficult process in regard to content and technical requirements; and preparing and installing individual reports requires quite some time. If a report includes a large quantity of data, the procedure for creating it can be very time consuming.

Libraries often need a quick overview of their data and they need to process it for various reports or statistical reviews. For these purposes we have developed a software that allows libraries to export their local data. Exported data can be imported into various programs for data processing (e.g. MS Excel).

The data export software enables you to specify queries and use them to *find* the desired data in the local database, and then to *select* the data you would like to export. You do not need special privileges to use the software, but it is intended for COBISS3 software users that have comprehensive knowledge of the COBISS3 software. In order to effectively use the software and the exported data you also need to be familiar with the programs used to process this data in further procedures (e.g. MS Excel).

These instructions include a presentation of the data export software and a description of all steps for exporting data. The last part of the document includes an example of creating a list of accessioned material based on the data export.

2 Presentation of the data export software

You open the data export software in the basic window of the COBISS3 software user interface. Select the **Reports / Export data** method. The basic window for data export will open where you will find the COBISS3 software modules (*Figure 1*).

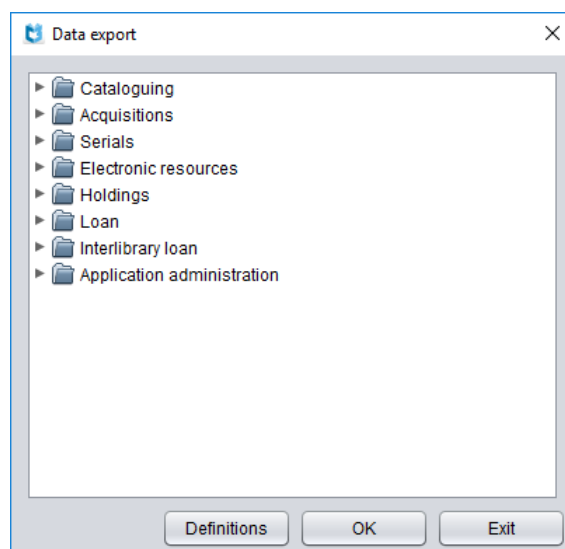


Figure 1: Basic window

2.1 Selecting the input class

Select the module where you will find and select the data you wish to export in the basic window. Double click the icon in front of the module name or the module name. The structure of the selected module opens – module classes (*Figure 2*).

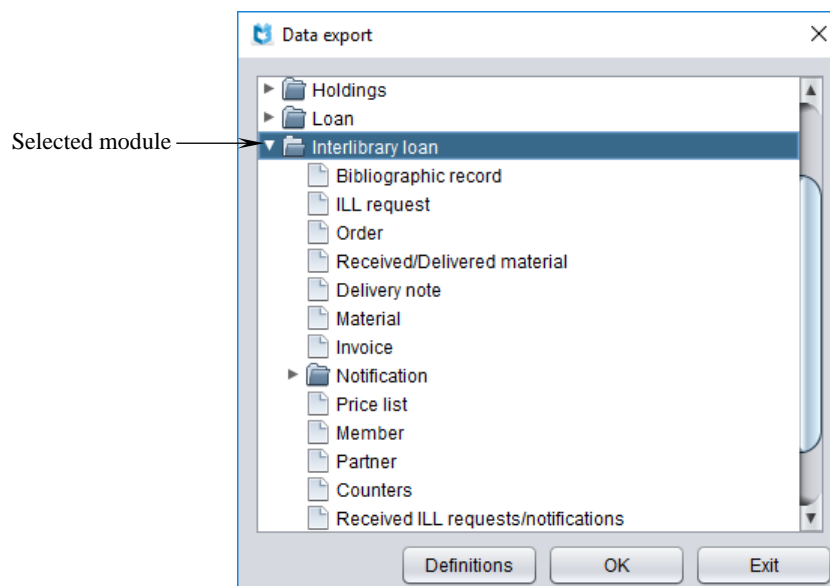


Figure 2: Basic window – selected module

Click on the class you want to select as the input class. Confirm the selection by double clicking the selected class or by clicking the **OK** button.

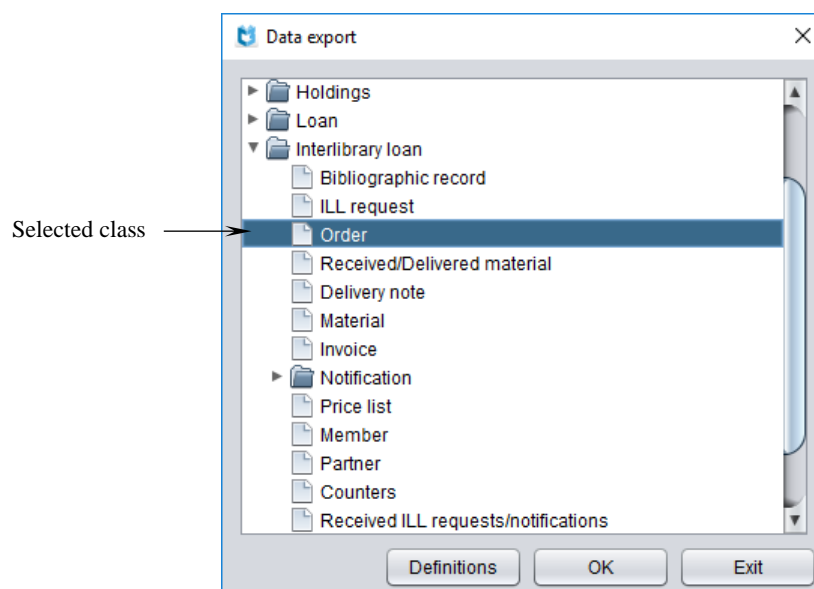


Figure 3: Basic window – selected class

After you confirm the selection a window for exporting data of the selected class will open (Figure 4).

Note:

*The selected class (or the **input class**) has an important role in searching and selecting the data you want to export. After selecting the class you can find and select the data you want to export in this class or the classes related to it.*

*If the input class is included in multiple modules, **it does not matter** where you select it. **Partner** is one of those classes that can be selected in the modules Acquisitions, Serials, Electronic Resources, Loan, Interlibrary Loan, and Application Administration.*

2.2 Data export window

Elements of the data export window (Figure 4):

- title bar with the displayed input class you selected for the data export (**Data export – <input class name>**);
- central part of the window that includes:
 - an icon for specifying a request in the selected class;
 - a list of attributes of the selected class;
 - a list of relationships (classes related to the selected class);
- status bar that includes the buttons:
 - **Export** (enables you to export data from the local database into a text file);
 - **Add subfields** (enables you to add subfields in the classes **Bibliographic record**, **Authority record (CONOR)**, **Authority record (SGC)** and **CORES**);
 - **User attributes** (enables you to add user attributes in the classes **Bibliographic record**, **Authority record (CONOR)**, **Authority record (SGC)** and **CORES**);
 - alternating **Show selection** (enables you to see a definition for data export) or **Show all** (enables you to see the attributes and relationships of the selected class);
 - **Clear selection** (enables you to delete a definition for data export);
 - **Find** (enables the display of the number of objects that the software finds in the database based on the specified queries);
 - **Save** (enables you to save definitions for the data export);
 - **Exit** (enables you to close the window of the selected class).

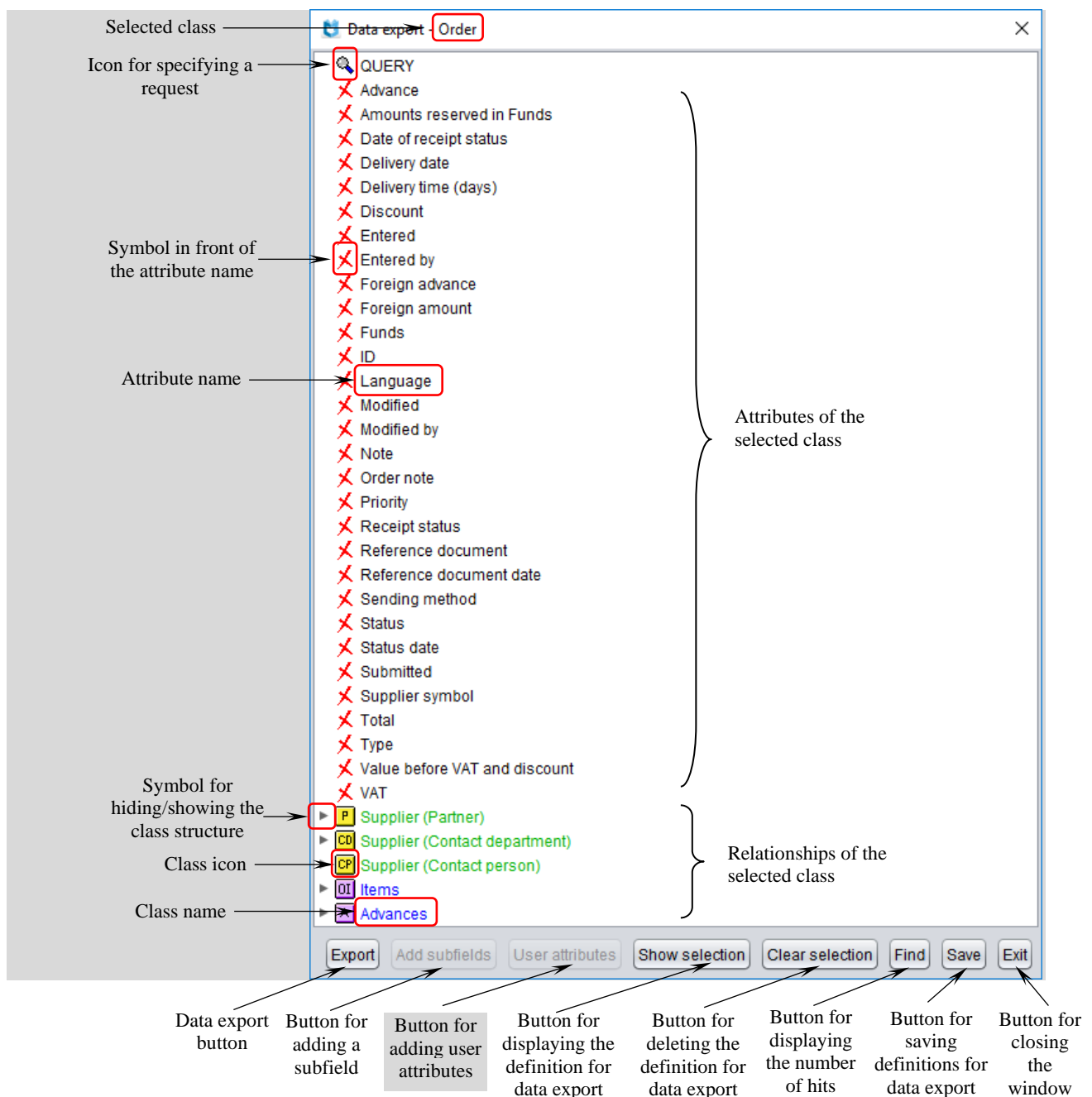


Figure 4: Window of the selected class

2.2.1 Attributes of the selected class

Usually you do not want to export all data but only some of it. You select the data you want to export by selecting attributes. A list of attributes of the selected class is used to select the attributes values you want to export.

The following is displayed on the list of attributes:

- attributes of the selected class (the same attributes as in the browser in the part of the window with the attributes list are displayed if you select an object from this class on the workspace in all the software modules, except in the **Cataloguing** software module, where all attributes are displayed);
- attributes from reports added by IZUM for the purposes of data export if necessary (e.g. upon request from a specific library);
- user attributes (if they are defined as part of the **Hit list formats** method). The procedure of defining different types of hit list formats in the search results is described in the *COBISS3/Cataloguing User Manual*, see chapter 12.1.2 and chapter 12.1.3).

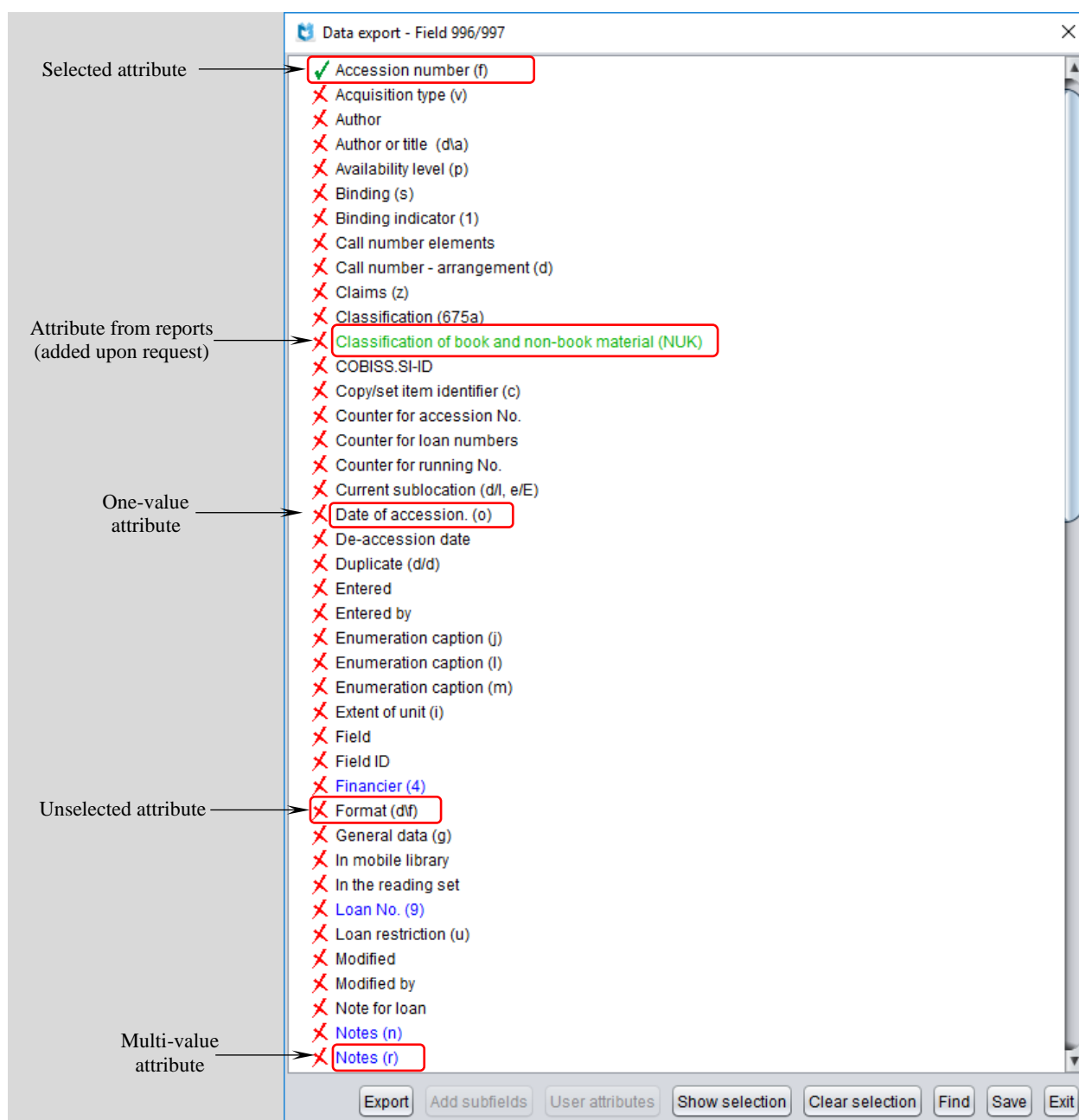


Figure 5: Attributes of the selected class

Before the name of each attribute there is a symbol indicating whether the attribute is selected (✓) or not (✗).

The list of attributes is in alphabetical order and the attributes are represented with three colours (Figure 5):

- **black** – attributes with one value;
- **blue** – attributes with multiple values (multi-value or repeatable attributes);
- **green** – attributes from reports that are added to the list of attributes for the purposes of data export upon request.

Example (Figure 5):

When accessioning the material you can enter one accession number and one date of accessioning, so both attributes from the **Field 996/997** class ("Accession number (f)" and "Date of accession. (o)") are displayed in **black**.

You can enter multiple accession notes into the holdings data, so the attribute "Notes (r)" from the **Field 996/997** class is displayed in **blue**.

For the purposes of creating statistical reports for holdings the attribute "Classification of book and non-book material (NUK)" was defined in the reports. The attribute was also added for the purposes of data export, and so it is displayed **green** on the attributes list of the **Field 996/997** class.

Tips:

Depending on which data you want to export, you can select the corresponding attributes in the selected class and in its relationships.

*You can add one (e.g. 200a) or more subfields (e.g. 200abef) with the values you would like to include in the data export with the **Add subfields** button in the **Bibliographic record**, **Authority record (CONOR)**, **Authority record (SGC)** and **CORES** classes (if it is selected as the input or related class). The added subfields are included after the attributes of the selected class and are available only for preparing the current definition for the data export. This means that they are not saved when you exit the data export software.*

2.2.2 Relationships of the selected class

In the window of the selected class all classes related to this class are displayed under relationships. Before the class icon there is a symbol indicating whether its structure (the attributes and relationships of this class) is shown (▼) or hidden (►).

The relationships are displayed in two colours (Figure 6):

- **green** – relationships with one-to-one ratio (1:1);
- **blue** – relationships with one-to-many ratio (1:M).

The list of relationships of a selected class is organized in the same way as the list of objects in the part of the window with relationships in the browser if you select an object from this class in the workspace. In the window of the selected class the list of relationships is more extensive, because it includes all classes where the objects, with which the object from the selected class can be related, are saved.

Example (*Figure 6*):

One order for interlibrary loan can be sent to one supplier (relationship 1:1), so the classes (related to the order) that can include data on one supplier (these classes are **Supplier (Partner)**, **Supplier (Contact department)**, **Supplier (Contact person)**) are displayed in *green*.

In interlibrary loan you can reserve home library material for the customer – individual items (relationship 1:1) or a set of items consisting of multiple items (relationship 1:M). That is why the classes (related to the order) with saved data on reserved material (bibliographic data and holdings data) are displayed twice – first in green (classes **Bibliographic record** and **Fields 996/997**) and then in blue (classes **Bibliographic record** and **Fields 996/997**).

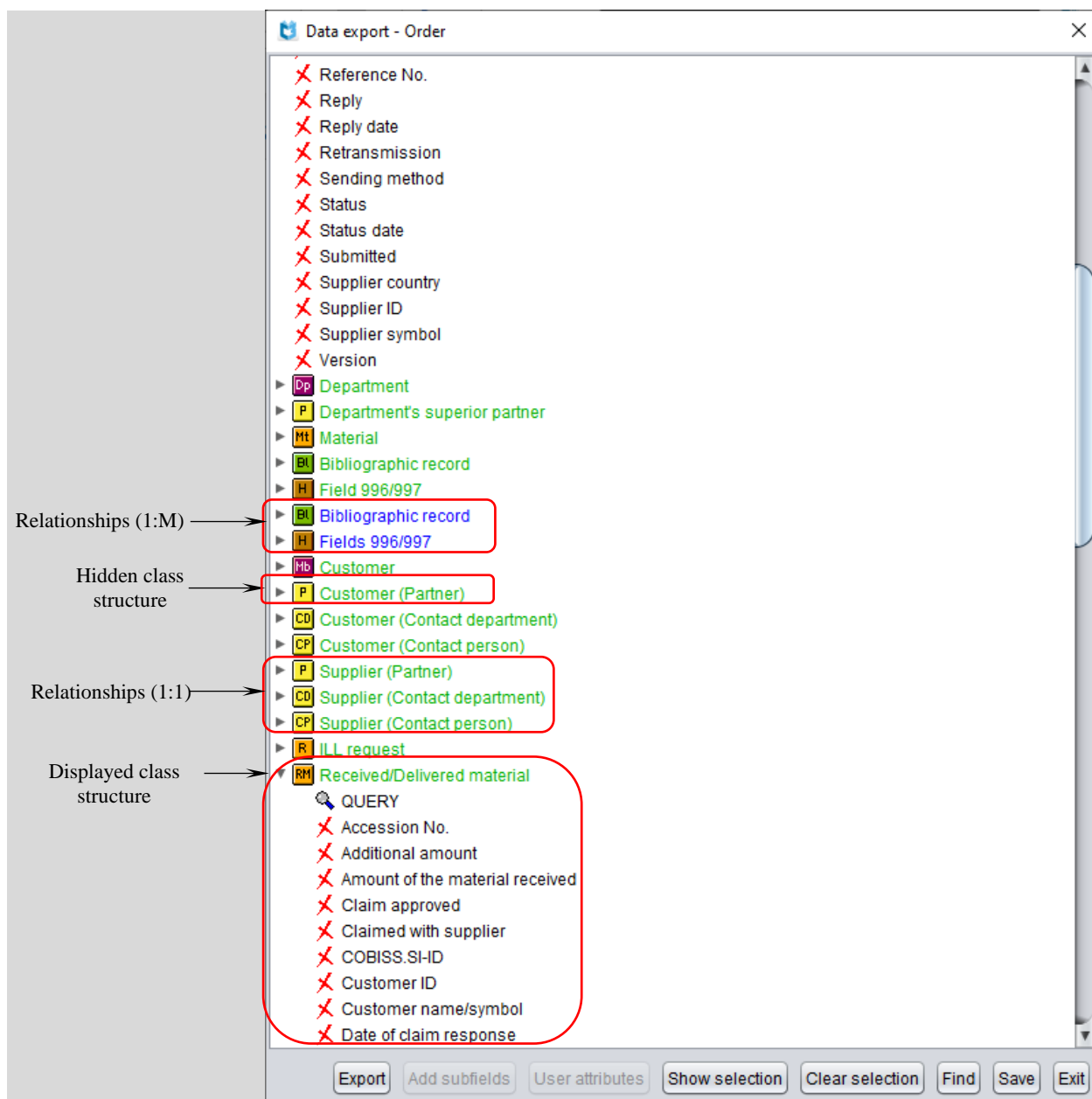


Figure 6: Relationships of a selected class

Note:

*You can display **four** levels of relationships in the window of the selected class.*

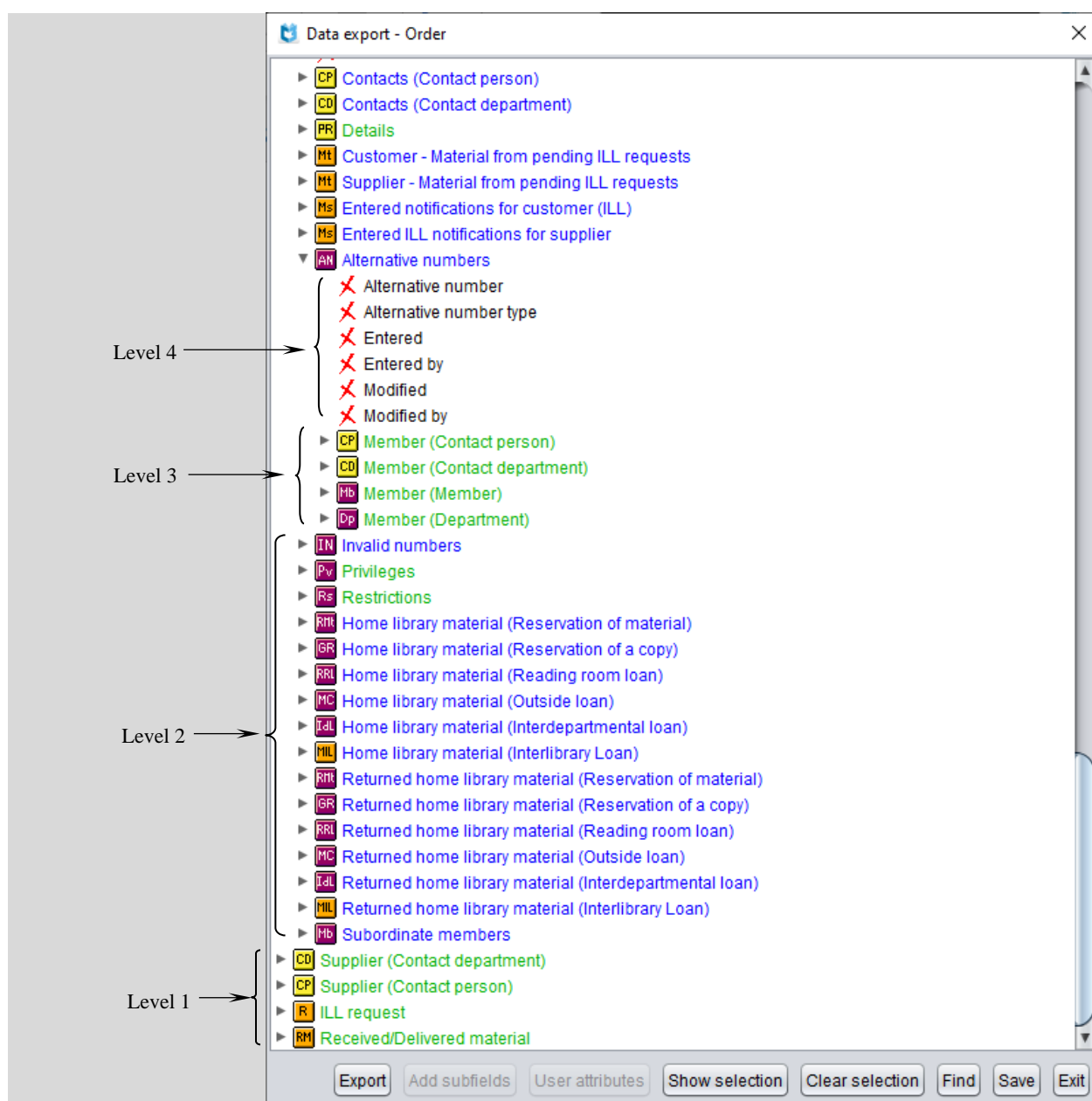



Figure 7: Window of the selected class – levels of relationships

In the class you select from the relationships the following elements are displayed:

- icon  for specifying a query in this class,
- a list of attributes of this class,
- a list of relationships of this class.

You can also specify a query and select the attributes for data export in the classes among the relationships.

3 Data export

This chapter describes how to create a definition for exporting data and how to export the data. Other options that are available after selecting the input class are also described.

3.1 Data export procedure

Follow these steps to export the data:

1. Select the **Reports / Export data** method in the basic window of the COBISS3 software. The basic window for data export will open.
2. Select the input class based on which you will find and select the data you want to export.
3. Create the definition for data export.
4. Export the data.

Before you export the data you can review the definition for the data export (see chapter 3.2.1) and check the number of hits found by the software in the local database based on specified queries (see chapter 3.2.2). You can also delete the created definition for data export (see chapter 3.2.3) and specify a new one or save it and use it again later (see chapter 3.2.4).


3.1.1 Preparing a definition for the data export

Preparing a definition for the data export consists of two steps:

1. *specifying queries* used to find desired objects in the local database, and
2. *selecting attributes* with values you want to export.

3.1.1.1 Specifying queries




After you select the input class you can specify a query which can be used to search for the data you want to export in this class.

1. Double click the  icon or the word "QUERY" in the window of the selected class (Figure 8).

The window for specifying a query will open.

2. Specify the search requests.

The entered search requests make up the query used by the software to search for the data in the local database.

3. Click the **OK** button. The window for specifying a query will close and the query is set. The  mark is added to the  icon in the window of the selected class which means the query is specified (.

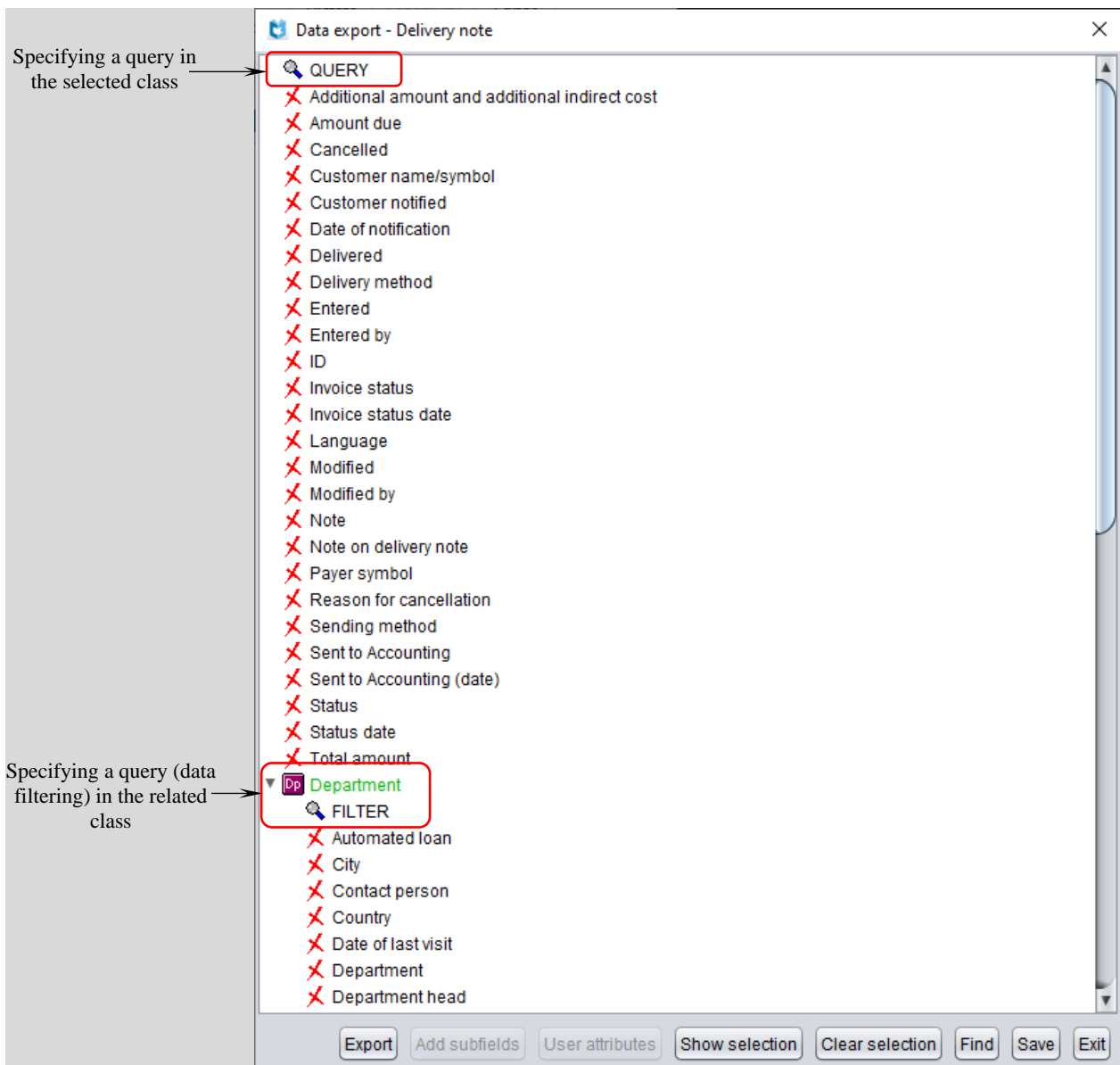




Figure 8: Window of the selected class – specifying queries

If the word "QUERY" is shown next to the  icon, the software starts the query and performs the search as soon as you close the window for specifying a query by clicking the **OK** button. In this way you can check the search results, i.e. the number of object found by the software based on the specified query (or multiple queries) in the local database, before you export the data.

In some classes that are selectable in the basic window (as input classes) or in the window of the selected class (in the relationships) the word "FILTER" is shown next to the  icon instead of the word "QUERY". You can specify the query in these classes as well, but you cannot check the results of the set query (number of hits), because data filtering is performed only after you export the data, which means that the search results are visible only in the text file with the exported data.

Notes and tips:

- *If you do not specify queries for searching data in the input class and the classes related to it, all objects from the input class will be included in the export and only the data you selected will be exported.*
- *If you cannot find the desired data in the selected class by using the query, you can also specify additional queries in classes related to the selected class. If the definition for data export is made up of multiple queries, the logical operator "AND" is applied between queries.*
- *Specifying queries is not possible in some classes (not even with data filtering). Such classes can only be selected in the window of the selected class (in relationships).*

3.1.1.2 Selecting attributes

Usually you do not want to export all of the data that was found, but only some of it. You can specify the data you want to export by selecting attributes with values you want to export.

In the window of the selected class double click the attribute name or the symbol in front of its name (✗). By doing this the symbol changes to ✓ (Figure 5).

If you would like to cancel the attribute selection, double click its name or the ✓ symbol in front of its name.

3.1.2 Data export

After you create the definition for the data export you can export the data that was found and selected into a text file:

1. Click the **Export** button in the window of the selected class.

If you did not include any queries in the definition for the data export, the software displays a notification that all objects from the selected class will be included in the export and offers you the option to continue or to cancel the export.

Note:

The software also displays a notification if you specified a query only in the class where the software performs the data filtering when exporting data (these are the classes where the word "FILTER" is written next to the 🔍 icon instead of the word "QUERY").

If you decide to specify a query before exporting the data, close the notification window by clicking the **No** button.

If you really want to include all objects from the selected class into the export, close the notification window by clicking the **Yes** button. The **Data export** window will open.

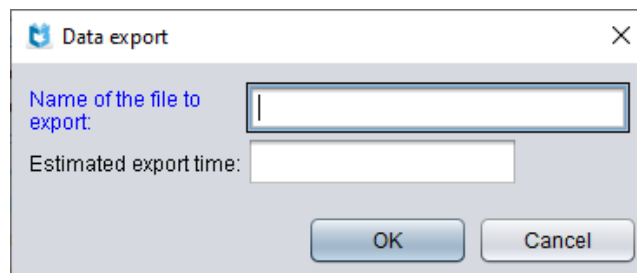


Figure 9: Data export window

2. In the **Data export** window that opens, enter the name of the file where you want to save the data in the "Name of the file to export" box.

In the "Estimated export time" enter or set the date and time when you want the export to take place. If you leave the edit box empty, the export starts at once.

If you enter a later time of execution, the export is saved under jobs (job *exportDatabase_<name of the file to export>_<current No.>*). Multiple data exports can be saved under jobs. Saved jobs can be subsequently edited and deleted (the procedure for editing jobs is described in the *Basic Guidelines COBISS3* manual; see chapter 4.8).

3. By clicking the **OK** button you confirm the data export. The software displays a message that the procedure for the data export has started and that you will receive the notification on the completion of the process via e-mail.
4. Once the procedure for data export is complete you receive an e-mail notification containing a link to the file with exported data (the file is compressed (*zip*) and has the extension *txt*). The name of the file with exported data is comprised of the file name specified during the data export, the name of the system user, who exported the data, and a seven-digit random number. Access to the file with the exported data is only available for seven days, so you should click the link to open the file as soon as possible and save it to a folder on your computer.

Note:

*Access to the text files with exported data which were exported by you and are saved on the server for your library (7 days after the data export) is also available with the method **Report / Files with exported data**.*

The text file with exported data contains the following data (*Figure 10*):

- the name of the selected (input) class;
- the specified query (or multiple queries);
- a line with selected attributes (in attributes you selected under relationships the name of the relationship is displayed next to the name of the attribute);
- the exported data (the values of exported attributes are separated by the "|" sign):
 - if the attribute, field or subfield value is in the form of a description, the entered value is exported (in the same form as it was entered),
 - if the attribute, field or subfield value is coded, the code and the value are exported,

- in repeatable attributes all entered values are exported; the values are separated by a comma (","),
- in checkboxes the value *Yes* or *No* is exported,
- in the *Field with locally defined content (993)* attribute the data of all text and numeric subfields of the 993 field are exported in a structured form; the repeatable subfields of the same 993 field are separated by a slash ("/"), different subfields of the same 993 field are separated by a comma (","), and after the last piece of data of the repeatable 993 field there is a semicolon (";").

Note:

The sequence of the exported data is defined by the report definition.

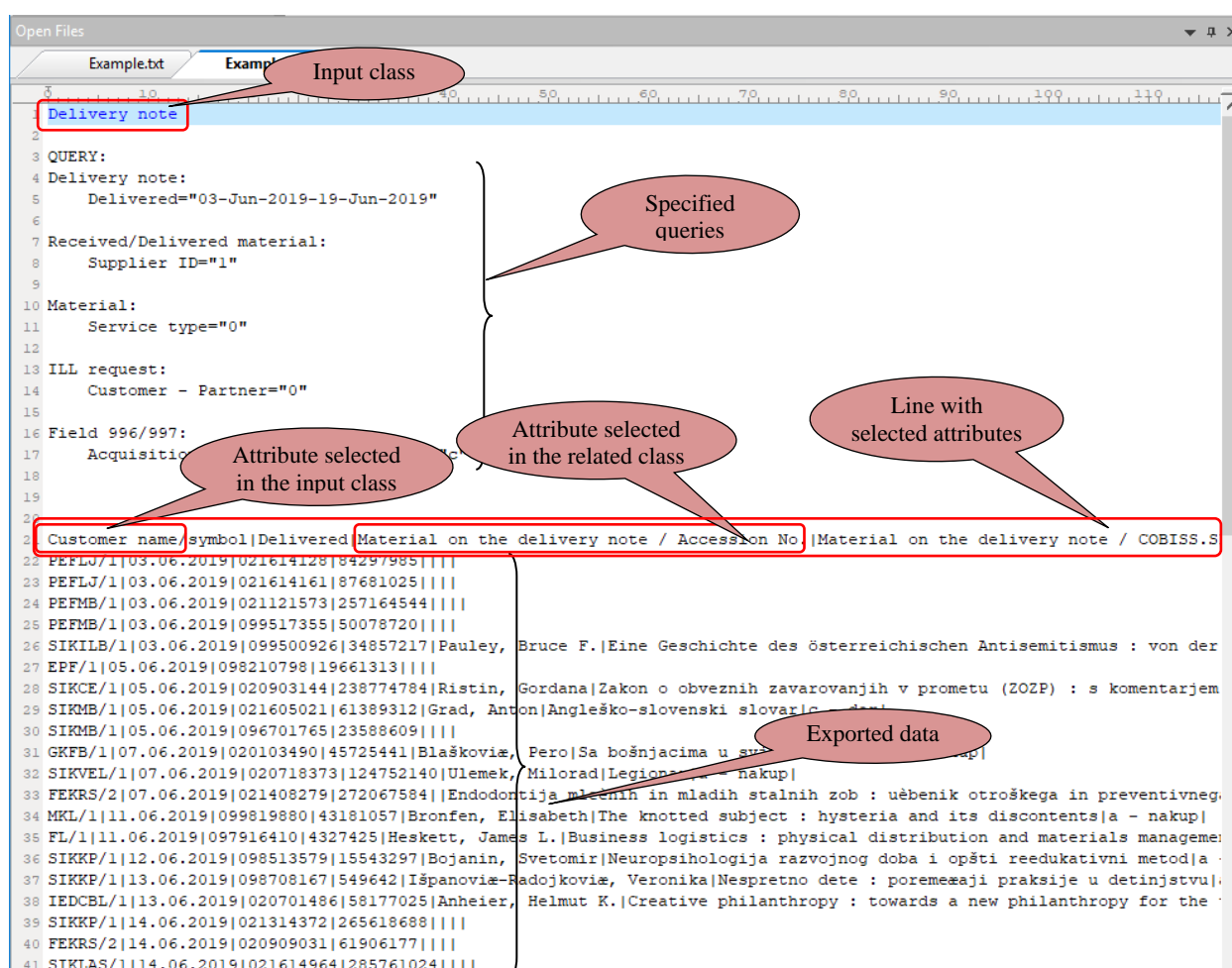


Figure 10: Text file with the exported data

Data from this file can be imported into a program like MS Excel and then edited.

Note:

You can save jobs for multiple data export if you would like to execute them later (e.g. outside of working hours).

3.2 Other options

3.2.1 Displaying the definition for data export

In the window of the selected class the view of the definition for data export you created can be very confusing. This depends on the selected input class and the queries you specified in the relationships, as well as attributes you also selected in the relationships (on different levels).

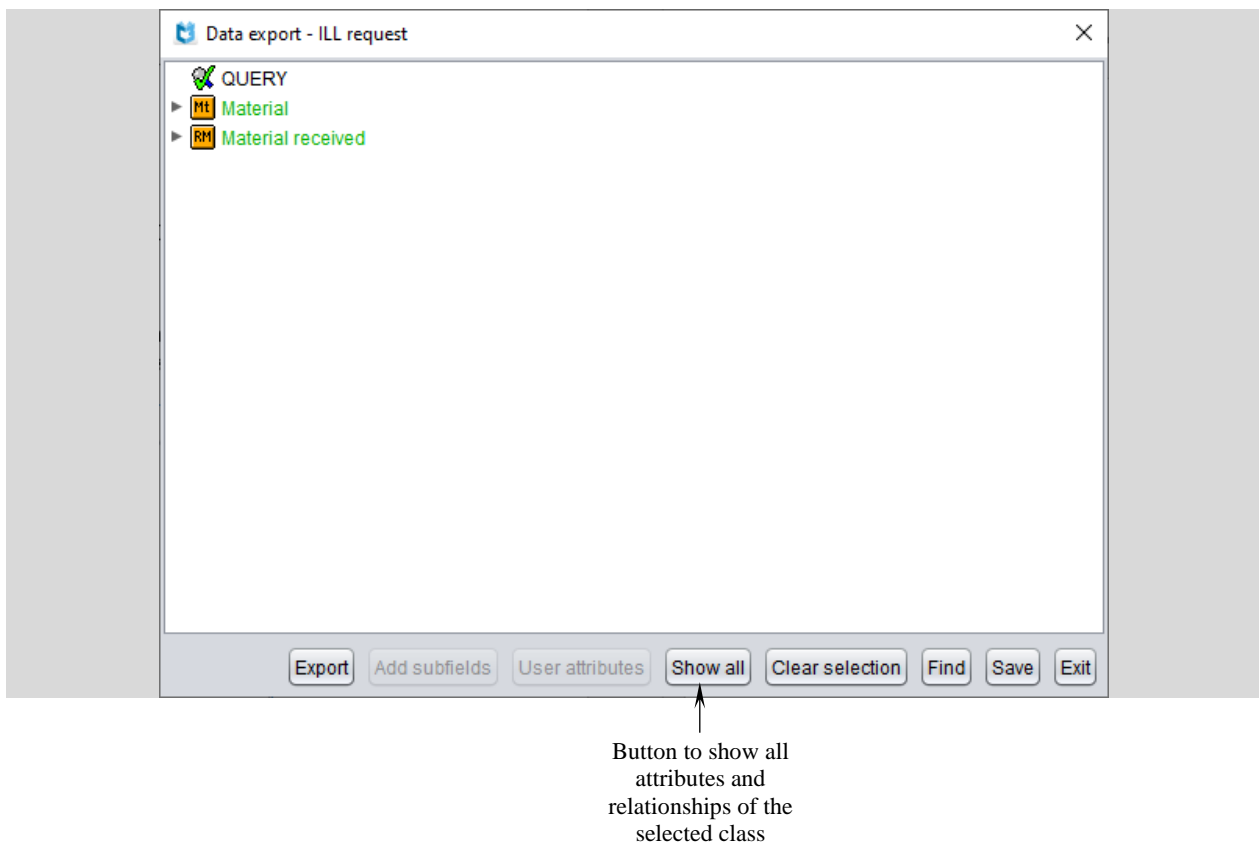



Figure 11: Display of the report definition – basic

Therefore you can view the created definition for data export in a more simplified form. Click the **Show selection** button in the window of the selected class. The central part of the window shows only classes where you searched and/or selected the data for the export. The status bar shows the **Show all** button instead of the **Show selection** button (Figure 11).

The structure of each class included in the definition for the data export can contain:

- the  icon that enables you to view the specified query,
- a list of the selected attributes with values you intend to export.

You can view the structure of each class by clicking the ► symbol in front of the class name.

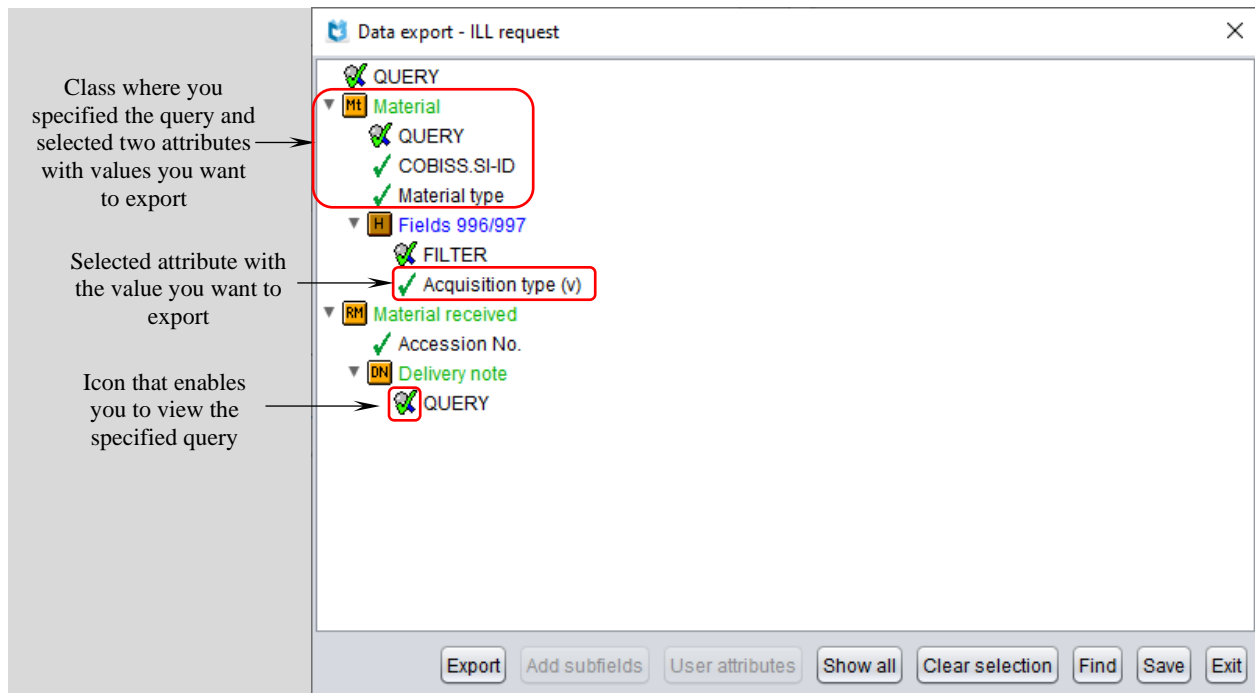



Figure 12: Display of the report definition – expanded

The displayed structure also shows you how the selected data will be arranged in the exported text file.

Example (Figure 12):

The report definition shows that the exported data will be arranged in the text file in the following order: COBISS.SI-ID, material type, acquisition type, accession number.

If you hover your mouse over the  icon or the word "QUERY" ("FILTER"), the software displays the specified query (Figure 13).

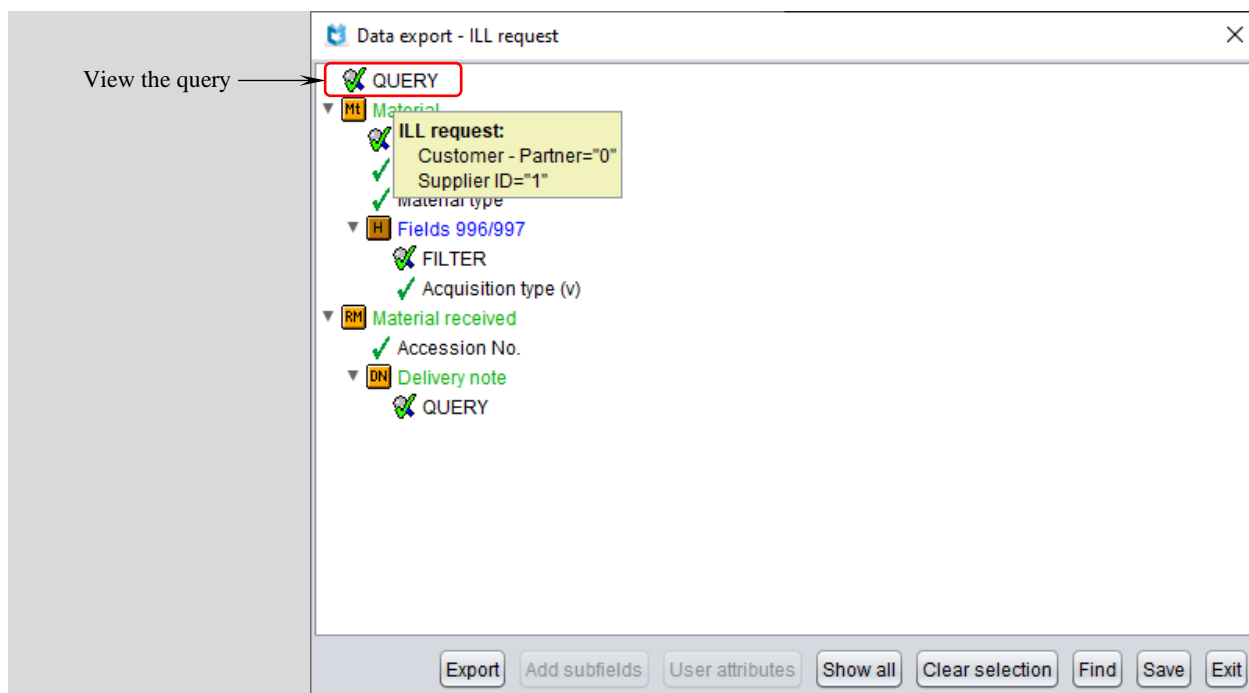





Figure 13: Display of the report definition – viewing the query

If you want to *delete* or *re-specify* the query, double click the  icon or the word "QUERY" ("FILTER") displayed next to the icon. The question "Do you want to delete the query?" appears. In order to delete the query click the **Yes** button. If you click the **No** button, the window for specifying the query will open where you can re-specify the current query.

You can close the window with the displayed query by clicking the **OK** or the **Cancel** button. Click the **OK** button if you re-specified the query and you want to save the changes.

Note:

You cannot delete the displayed query in the window for specifying the query (e.g. by deleting entered search requests and saving the changes). You can only delete the query in the window of the selected class by double clicking the  icon or the word "QUERY" ("FILTER") (regardless of the fact whether there is a complete structure of the selected class displayed in the window or only a definition of the report).

If you would like to de-select a specific attribute or *cancel* its selection, double click its name or the  symbol in front of its name.


To view the attributes and the relationships of the selected class again click the **Show all** button (Figure 11).

3.2.2 Displaying the number of found hits

If you would like to display the number of objects (i.e. the number of hits) that the software finds in the database based on the specified queries, click the **Find** button in the window of the selected class. The software displays the message "Number of hits: <number>".

Note:

*If you did not specify a query, the number of hits displayed after you click the **Find** button will correspond to the number of all objects saved in the selected class.*

*If you specified a query **only** in the class where the word "FILTER" is written next to the  icon, the number of found hits will also correspond to the number of all objects saved in the selected class (because the software filters the data when it exports them).*

If you specified multiple queries, the logical operator "AND" will be applied in the performed queries.

3.2.3 Deleting the definition for the data export

You can delete the created definition for the data export. Click the **Clear selection** button in the window of the selected class. The software displays the question "Do you really want to delete the definition for the data export?". If you click the **Yes** button, all specified queries will be deleted and all selected attributes will be deselected. The window of the selected class will stay open.

3.2.4 Saving the definition for the data export

You can save a created definition for the data export. Click the **Save** button in the window for data export of the selected class. The window **Saving a definition for the data export** will open. Under "Name" enter a name by which you would like to save the definition for the data export, and you can also add a short description of the definition if needed – enter the text under "Description". Save the definition by clicking the **OK** button. If you enter an existing name, the software notifies you and does not save the definition.

You can access the saved definitions for the data export from the basic window for the data export (**Reports / Export data** method) (*Figure 1*). After you click the **Definitions** button a window with a list of all definitions for the data export you saved and also of all definitions created and shared by other users will open. The list is in chronological order. The name and the description of the definition will be displayed. In shared definitions you will see the user name of the user that created and shared the definition in front of the name of the definition (*Figure 14*).

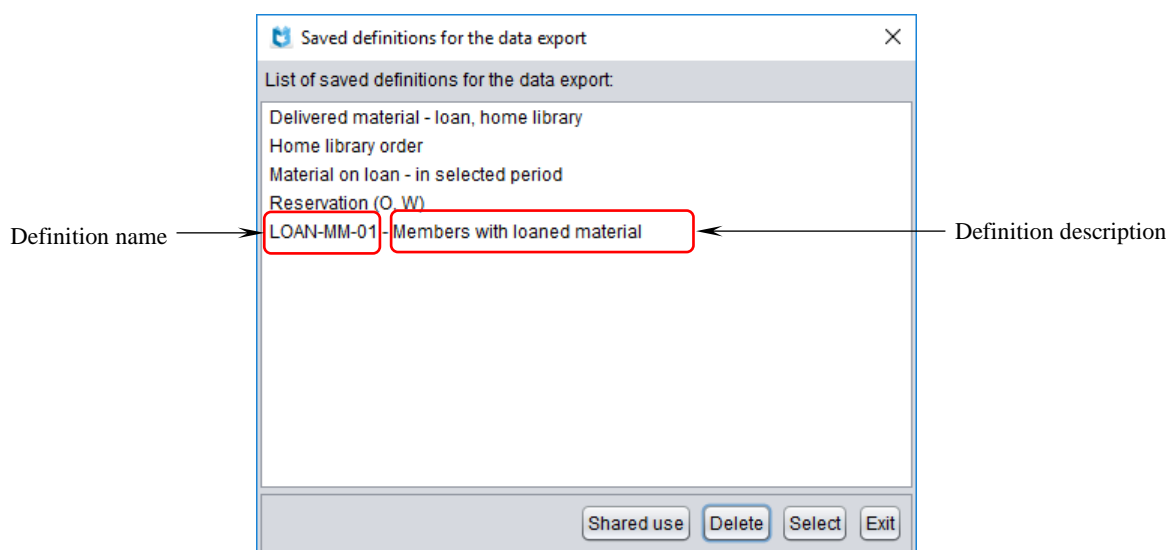


Figure 14: List of saved definitions for the data export

The window contains the following buttons:

- **Shared use** (enables you to save the definition at the level of the library)
- **Delete** (enables you to delete the saved definition)
- **Select** (enables you to select a saved definition; after selecting a definition you can start the data export, but you can also only view the definition or re-specify it and save it as a new definition)
- **Exit** (enables you to close the window with the list of saved definitions)

Note:

Saved definitions for the data export are connected to a username. Each system user can share every definition they have created and saved.

A shared definition can only be deleted by the system user that created and shared the definition.

4 An example of using the data export software

This chapter contains an example of preparing the data export. The data can also be acquired by creating the list *H-L-01: Accession book* in the *COBISS3/Reports* software module.

This example is used to show how to prepare a definition for the data export and how to export the data according to the data you want to export.

4.1 Defining the data and criteria for the selection

First consider which data on material that was accessioned in a selected time period you want to export.

You want to export the following data on this material:

- Accession number
- Date of accessioning
- Bibliographic item description
- Call number (arrangement)
- Acquisition type
- Supplier
- Invoice number and date
- Price
- Accession note

Then consider which criteria for the selection of the material that you want to include in the data export. The selected criteria should be the following:

- Date of accessioning: *1 January 2019–31 May 2019*
- Sublocation of the material: *Skladišče*
- Acquisition type: *purchase*

4.2 Selecting the input class

After you define the criteria for the data selection select the appropriate input class. Because you are interested in the data on accessioned material, you select the input class in the **Holdings** module. Select the **Field 996/997** class as the input class. The data on material accessioning is saved in this class.

Select the **Holdings** module in the basic window. Then select the **Field 996/997** class (*Figure 15*).

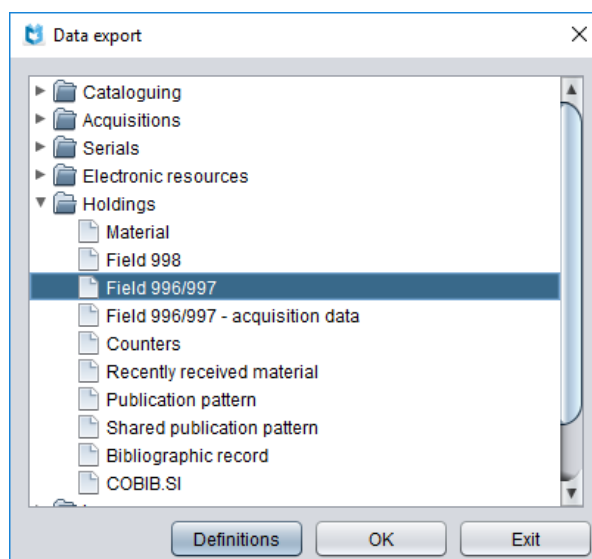


Figure 15: Selecting the input class Field 996/997

The window **Data export – Field 996/997** will open.

4.3 Creating the definition for the data export

4.3.1 Specifying the request

Specify the request so that it follows the criteria you defined for the material selection (see chapter 4.1).

In order for the data export to include only material accessioned in a selected time period, double click QUERY in the **Data export – Field 996/997** window.

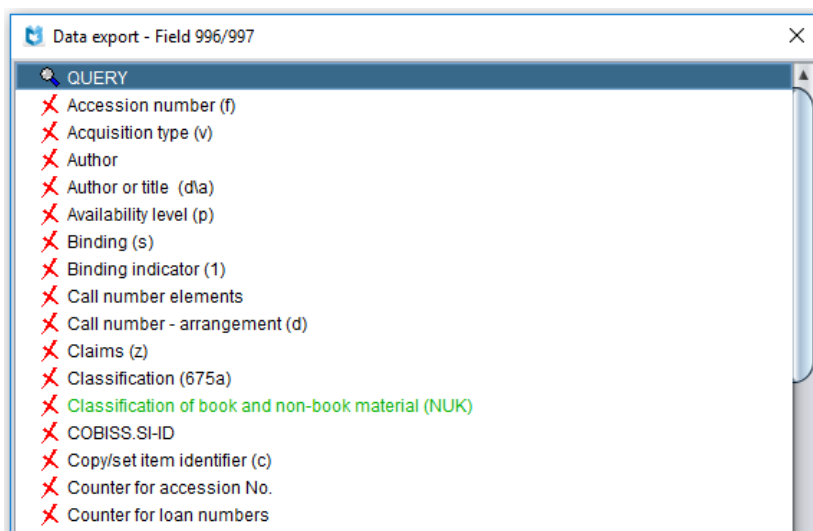


Figure 16: Specifying a query in the input class Field 996/997

The window **Search – Field 996/997** will open. Specify a query to find the material according to the set criteria (Figure 17).

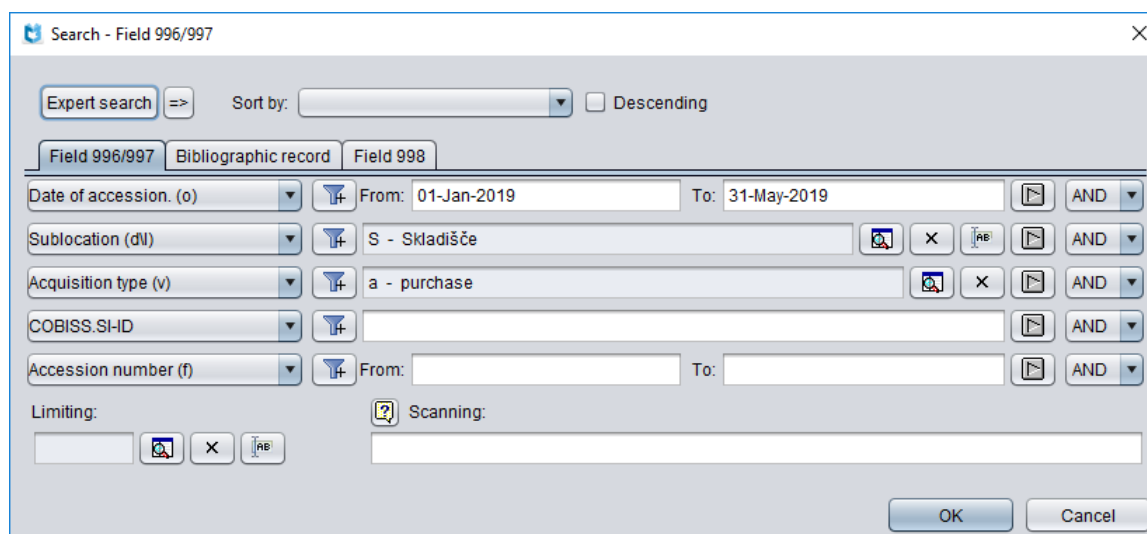


Figure 17: Specifying a query

Click the **OK** button. The window for specifying a query will close and the query is set.

If you click the **Find** button in the **Data export – Field 996/997** window, you can see the number of hits that correspond to the set query (

Figure 18).

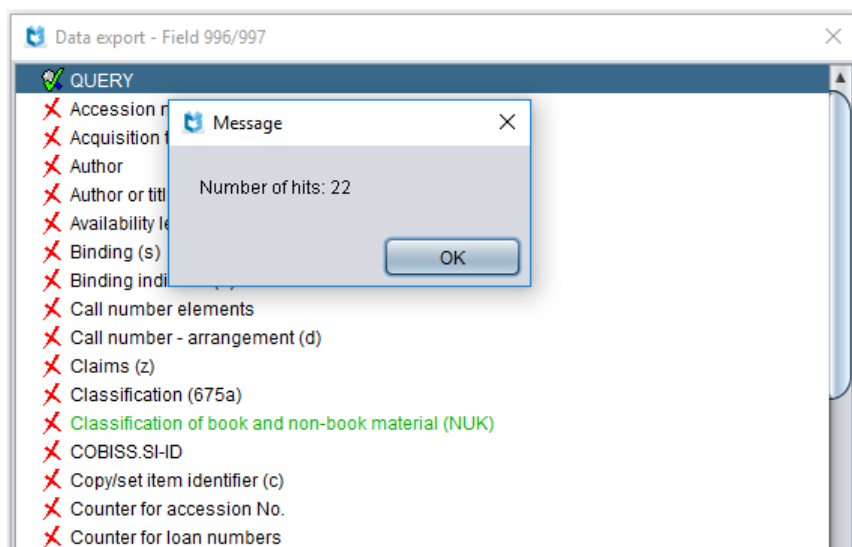


Figure 18: Checking the number of hits that correspond to the query

If you click the **Show selection** button, you can check the definition for the data export.

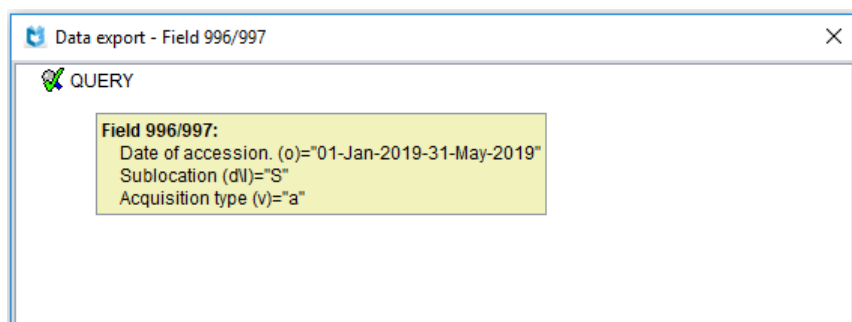


Figure 19: Checking the definition for the data export

4.3.2 Attribute selection

Depending on your decision about which data on the material you are interested in select the corresponding attributes for the data export.

Click the attributes *Accession number (f)*, *Date of accession. (o)*, *Call number - arrangement (d)*, *Acquisition type (v)*, *Supplier (2)*, *Price (3)*, *Notes (r)* in the **Data export – Field 996/997** window (*Figure 20*).

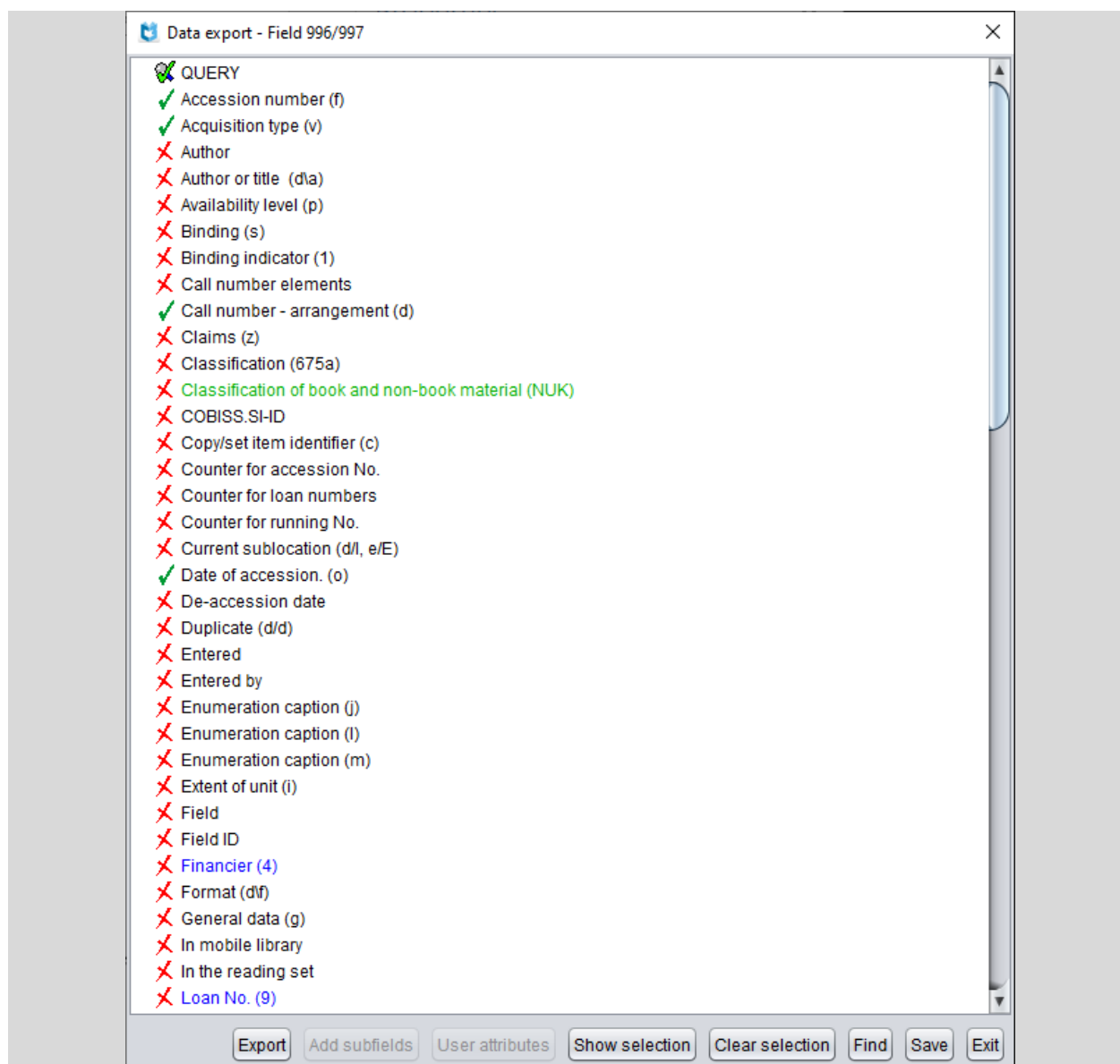


Figure 20: Selecting the attributes in the Field 996/997 class

You can find the invoice data in the related class **Acq. data**. Click this related class and select the attribute *Invoice (1)* – Figure 21.

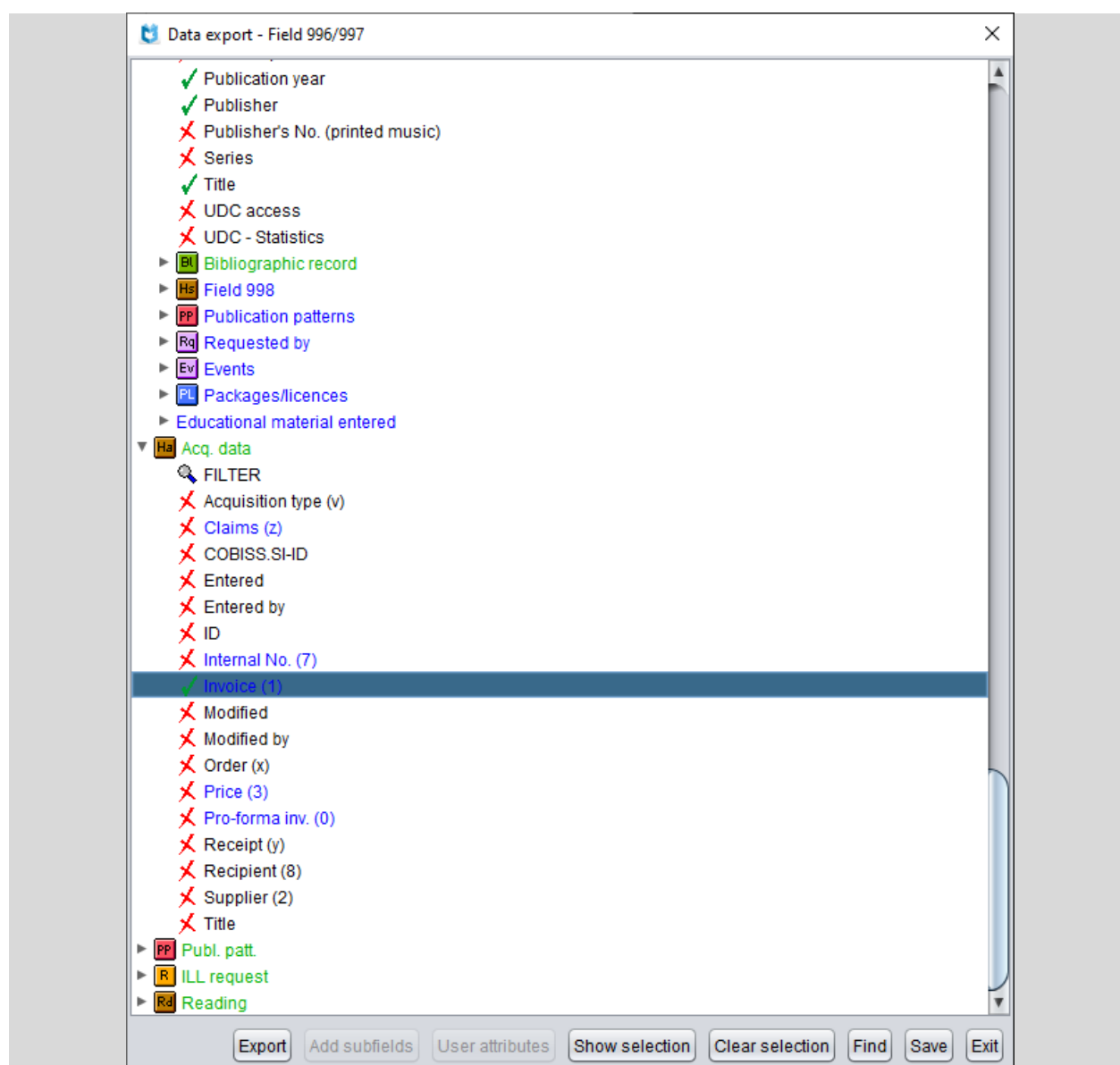


Figure 21: Selecting the attributes in the related class Acq. data

You can find the basic bibliographic data on the material you would like to export in the related **Material** class. In order to do this you click this class in the relationships and select the attributes that enable the export of the desired data (e.g. *COBISS.SI-ID*, *Author*, *Title*, *ISBN*, *ISSN*, *Publication year*, *Publisher* and *Physical description*) – Figure 22.

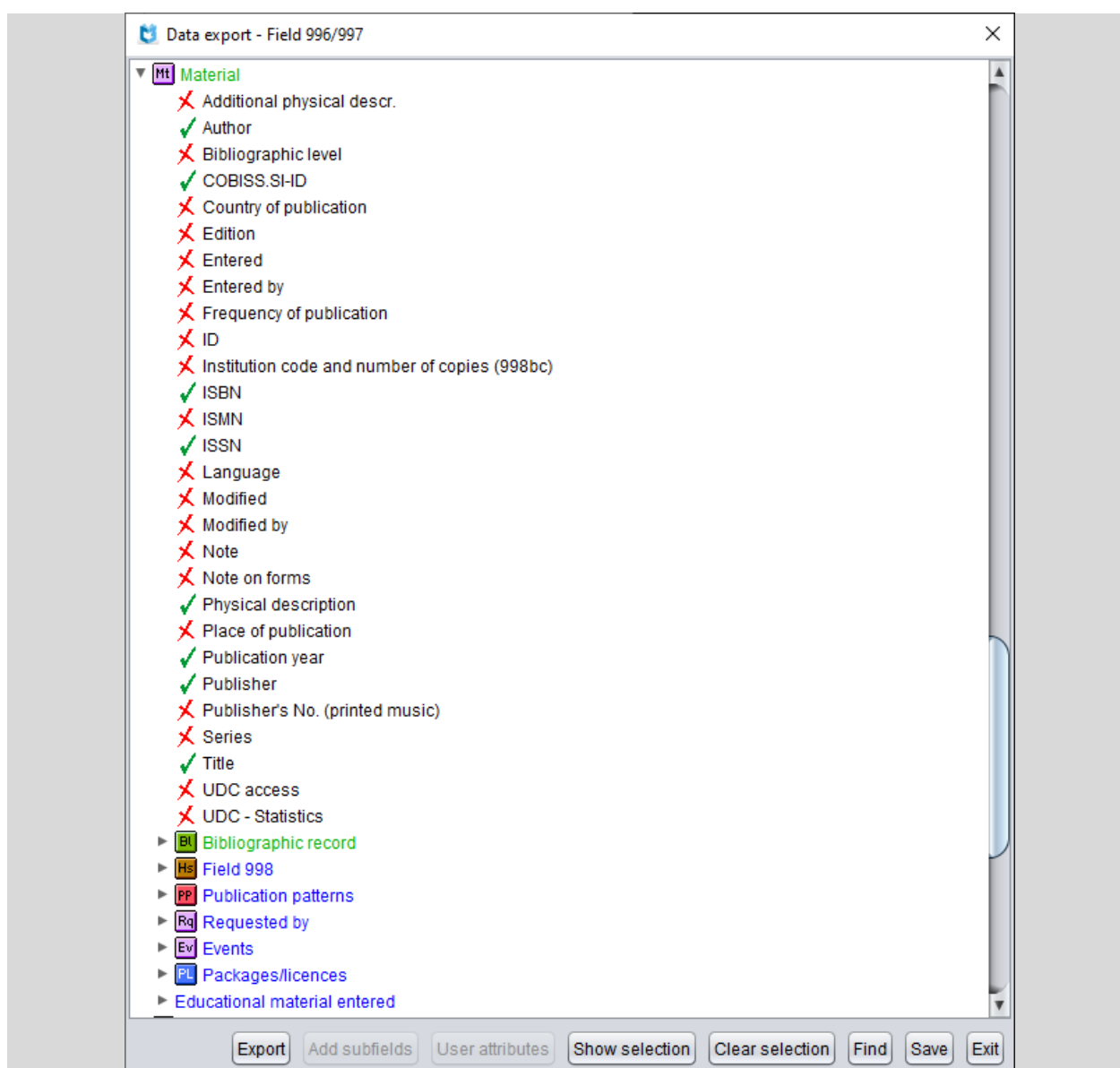


Figure 22: Selecting the attributes in the related Material class

If you click the **Show selection** button (*Figure 22*) in the **Data export – Field 996/997** window, you can check the whole data export definition (*Figure 23*) before confirming the data export.

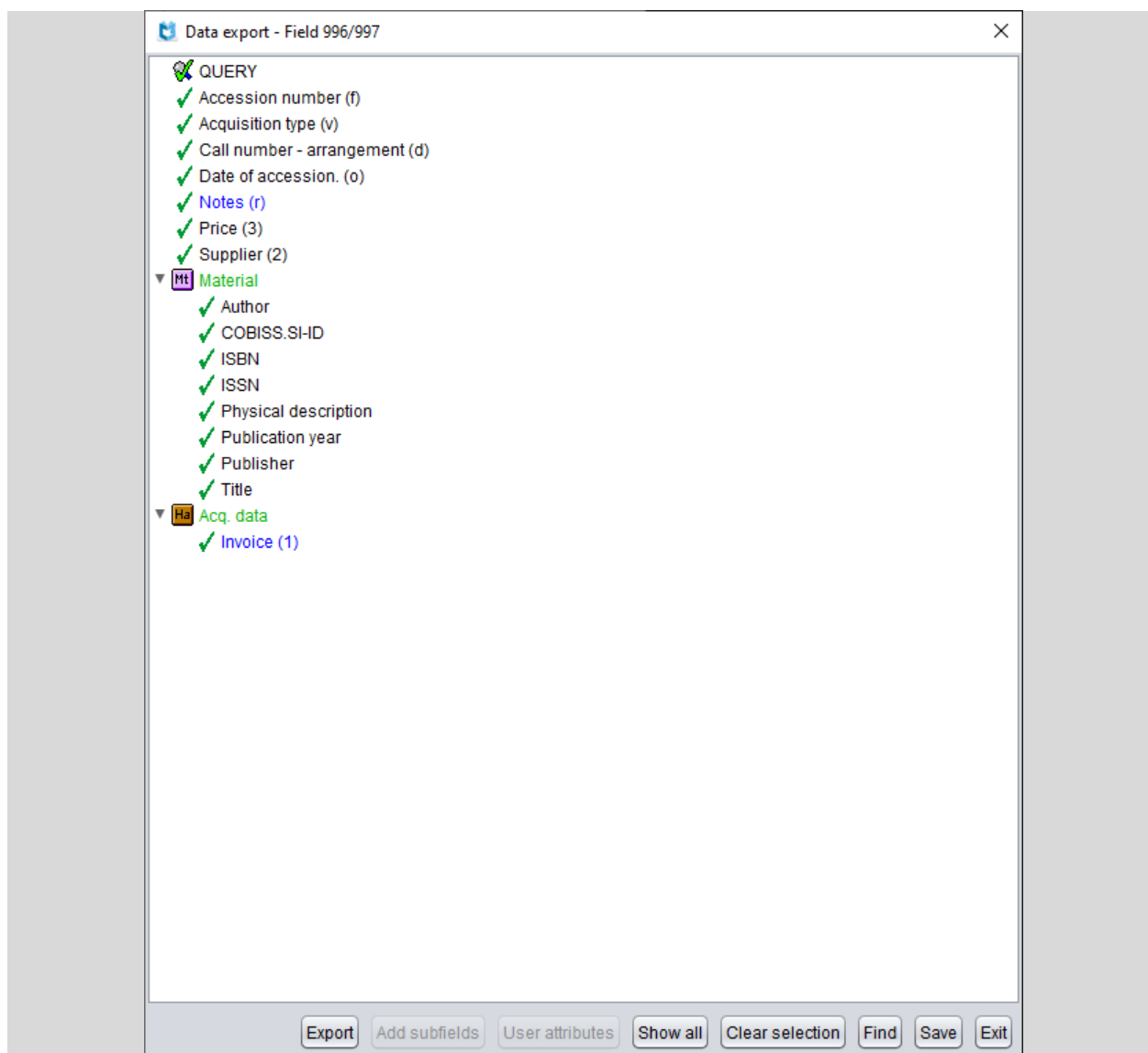


Figure 23: Checking the entire definition for the data export

The definition also shows the sequence in which the data is exported to the text file:

- *Accession number (f)*
- *Acquisition type (v)*
- *Call number – arrangement (d)*
- *Date of accession. (o)*
- *Notes (r)*
- *Price (3)*
- *Supplier (2)*
- *Author*
- *COBISS.SI-ID*
- *ISBN*
- *ISSN*
- *etc.*

4.4 Data export

After defining the criteria, export the selected data on the material. Click the **Export** button. Enter the name of the file, in which the data will be saved, in the **Data export** window. If you want to immediately export the data, do not enter the estimated export time. Otherwise, enter the time and date when the export should begin, and click the **OK** button. (Figure 24).

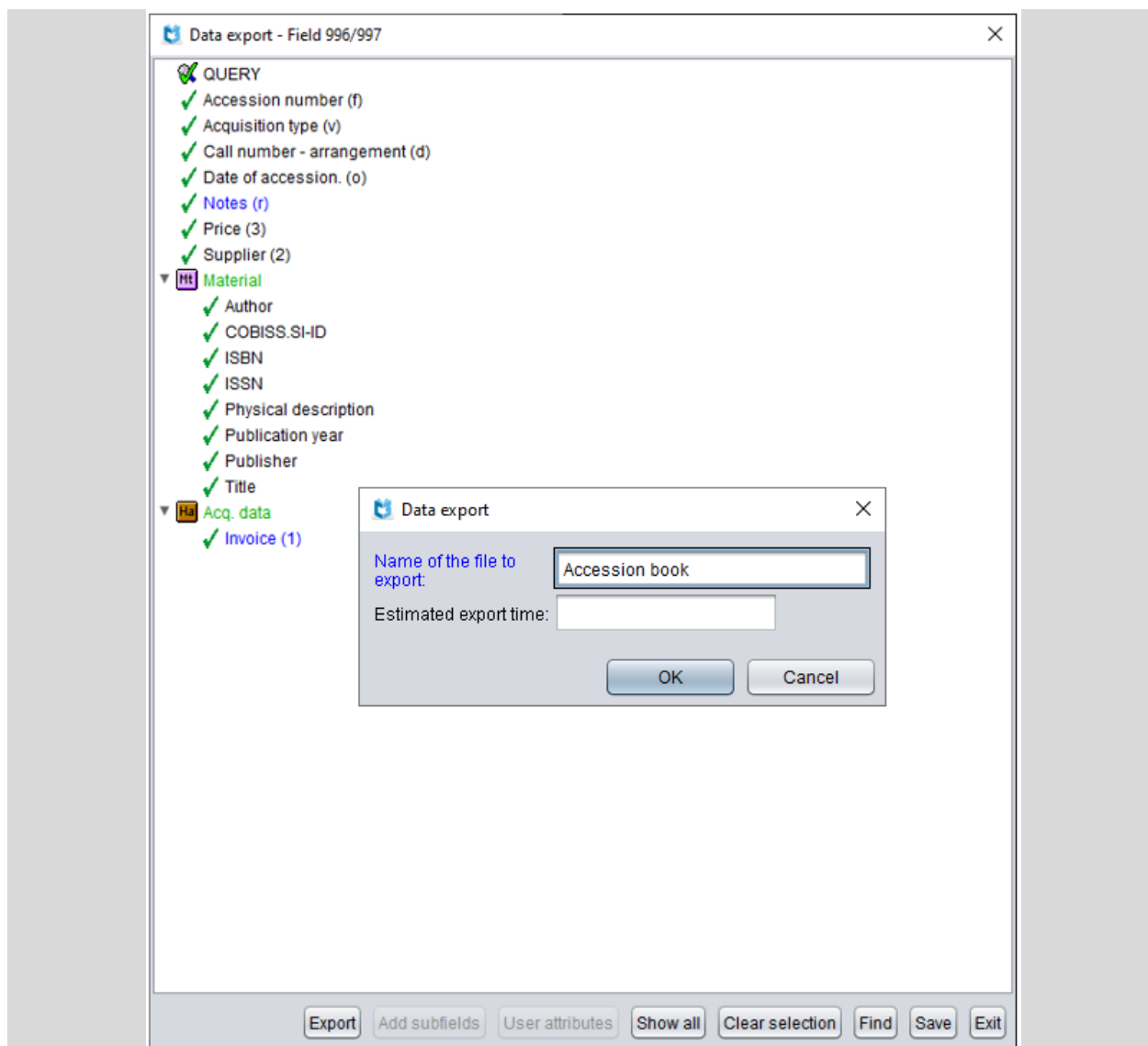


Figure 24: Export of the selected data

After the data export is complete you receive a notification. Click the link to the data in the e-mail and open the text file with the exported data. Save the file with the data.

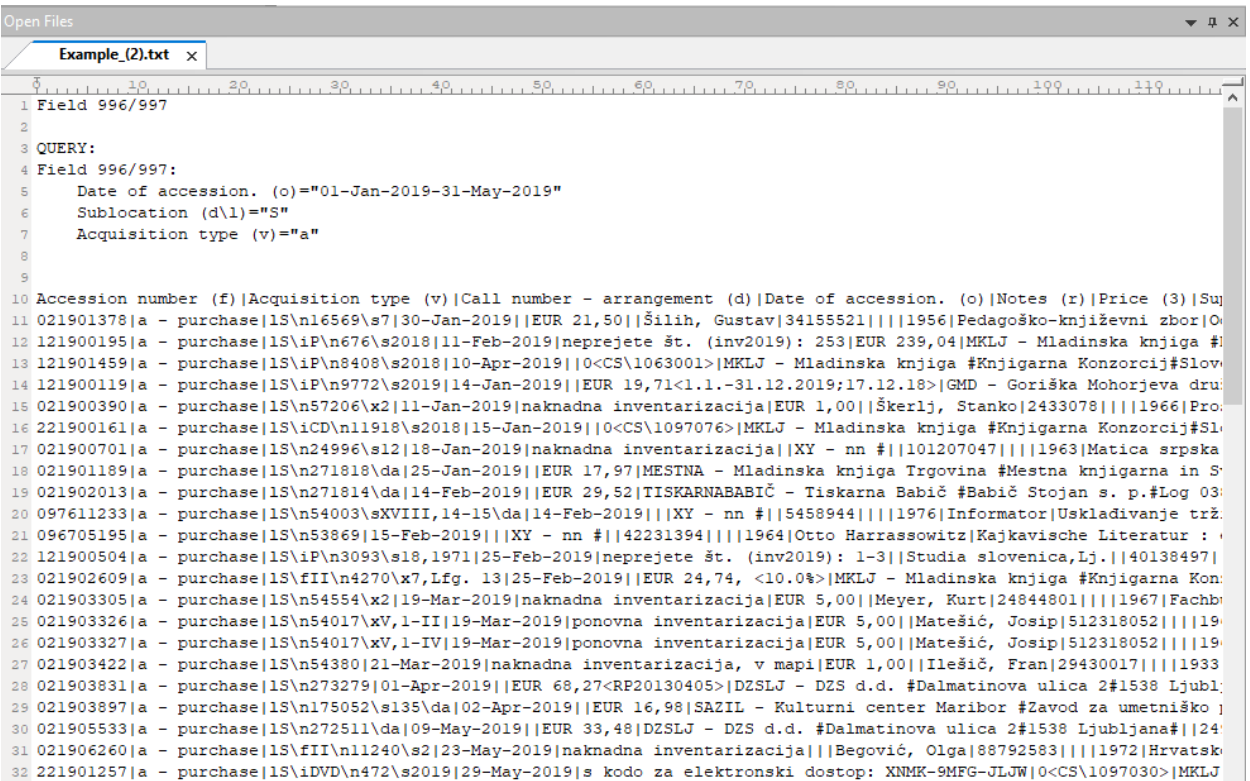


Figure 25: Exported data (part of the file contents)

Import the data into an appropriate software for further processing, like MS Excel, where you can edit them according to your needs.

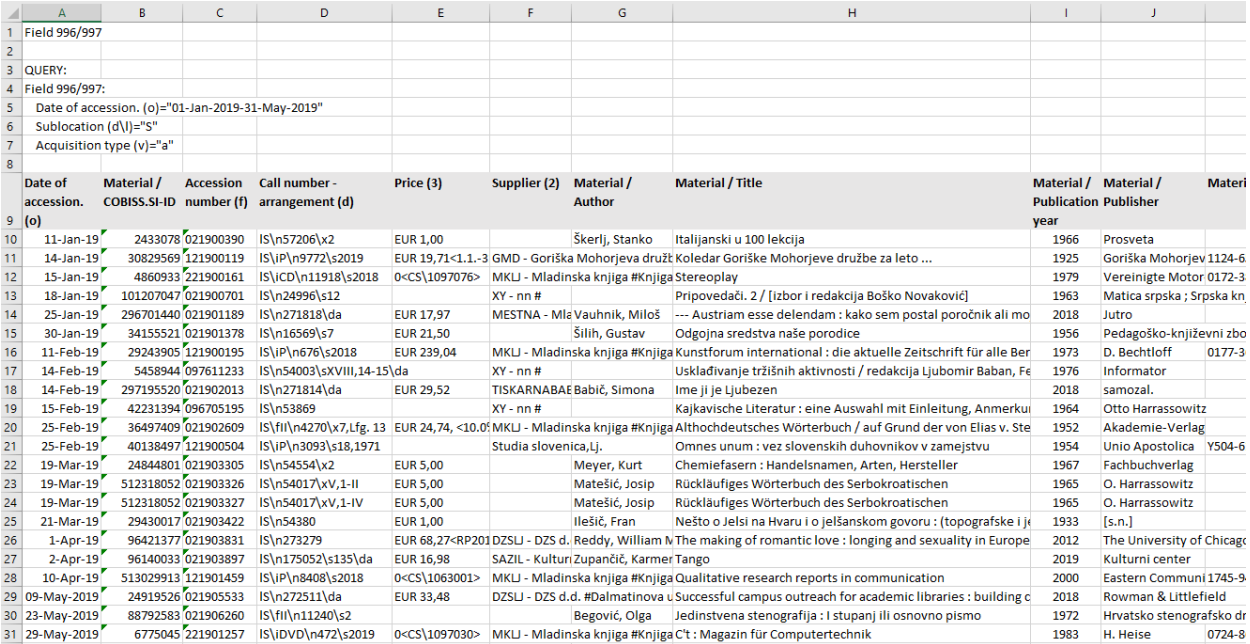


Figure 26: Data imported into MS Excel (part of the file contents)