ESEF-ERICA mapping tool [1]

User manual

Introduction 2

Version 1.4.5

11th April 2025

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[1] *This mapping tool has been created to harmonize and make possible the comparison of the publicly available financial statements of European non-financial listed groups in ESEF format (European Single Electronic Format), using to that aim a standard European common format (ERICA format, see more at www.eccbso.org). It includes mapping decisions (from ESEF XBRL tags to the ERICA format) derived from the experience of the use of consolidated accounts by members of the ERICA WG. The use of this mapping tool means the transformation of the original and official data published by European companies to other figures that imply the interpretation of the original data, a constraint that should be born in mind by final users. The work done and decisions taken by members of ERICA WG preparing the mapping tool, do not necessarily reflect the opinion of ECCBSO, or its national member institutions.*

Introduction

This user manual explains how the ESEF-ERICA mapping tool works. This mapping tool has been developed with the support of the Eurofiling Foundation and XBRL Spain, under the guidance of ERICA experts. Simply put the mapping tool (Excel workbook) in a Windows computer and run.

The tool enables the harmonization of the reports to a European common format using pre-mapping decisions taken by accountant specialists allowing the "fine-tunning" of each report with customized-mapping decisions taken by the user.

The tool is an stand-alone executable Excel binary workbook (file type .xslb) with about five thousand lines of Open Source VBA code (macros). The tool reads the ESEF iXBRL reports on .zip .xbri .xhtml .html .htm format using the Open Source tool *easyREADER*, that shows he facts as rows in an Excel sheet. The mapping function processes the facts selected by the user through its corresponding equivalences on the common homogeneous "ERICA format".

In an extended taxonomy (as usual in ESEF), Statements and Linkbases are also show as additional Excel sheets, as user help. A *Basic* version of the tool (file name ending in "B") uses the Open Source tool *easyINSTANCE*, with only a half of lines of code, to minimize tasks on security certification of source code, at the cost of show facts only, but no Statements/Linkbases.

The decimal separator (dot or comma) and alike are presented according to the Excel regional configuration. The tool is distributed with the usual Microsoft Excel References activated (including Microsoft XML v3.0 parser). If doubts or troubles, check the Technical Reference. No Internet connection or software installation is required: see details at security features

If you have any questions or suggestions about the use of the tool, please contact your ERICA coordinator. Alternatively, you may send your comments to XBRL Spain info@xbrl.es or to Eurofiling info@eurofiling.info

Disclaimer

The toll is based on Open-Source principles. The Open Source software modules and its related parts of this User Manual ("the user software") has been authored by Javier Mora and Ignacio Boixo, copyrighted © 2021-2025 under **Creative Commons Attribution 4.0 International** at https://creativecommons.org/licenses/by/4.0/ The use, modification, copy and distribution of the user software is licensed completely free and at no cost, but attribution is mandatory.

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easyREADER and *easyINSTANCE* are both Open Source subsets of *easyQC* (*Q*uality *C*ontrol, by easyESEF Ltd.), tool Certified as Review and Consumption Software by XBRL International.

Quick Start Guide

Load the ESEF report

In order to load the ESEF report, the user must go to the "Contents" sheet and click on the "Load ESEF report *File type: .zip .xbri .xhtml .html .htm*" button.

Take into consideration that the type of the input file must be or .zip or .xbri or .xhtml or .html or .htm which are the file extension types in which the ESEF reports are available on the websites.

CONTENTS

Load ESEF report
File type: .zip .xbri .xhtml .html .htm

GENERAL CHARACTERISTICS
General characteristics and employment

STATEMENT OF PROFIT OR LOSS
Function
Nature

STATEMENT OF COMPREHENSIVE INCOME
Comprehensive income

STATEMENT OF FINANCIAL POSITION
Assets
Liabilities and equity

STATEMENT OF CASH FLOWS
Cash flow

NOTES
Notes

The reduced format has been defined by the ERICA (European Records of IFRS Consolidated Accounts) Working Group.

References to the IFRS taxonomy refer to its 2024 version.

The Annual Reports are filed to the respective national Officially Appointed Mechanism (OAM)[2] and downloadable[3] by the public. It is used the European Single Electronic Format, designed by ESMA according to the iXBRL specification and IFRS taxonomy.

After loading the ESEF report, the user will find the Excel sheet "*Facts*" with a list of all the facts included in the ESEF report in the sheet **Facts**.

					easyREADER: ESEF reader for XBRL files. www.easyesef.			
					Input path:	C:\ESEF\Distribution_easyQC\2023-03-17		
				Languages:	EN (EL, FR)	Instance:	549300U0BOLVY36TGJ31-2020-12-31_en.	
			3	Scale=Thousands, decimal accuracy:		-3	Note that facts are always s	
			EUR	Currency ISO 4217				
Name		Fact	Notes	PeriodInit	PeriodEnd	UnitRef	Statement	Dimension
PropertyPlantAndEquipment		1,954,096,000			2020-12-31	EUR	210000	
PropertyPlantAndEquipment		1,878,221,000			2019-12-31	EUR	210000	
RightofuseAssets		38,498,000			2020-12-31	EUR	210000	
RightofuseAssets		42,652,000			2019-12-31	EUR	210000	
IntangibleAssetsAndGoodwill		39,545,000			2020-12-31	EUR	210000	
IntangibleAssetsAndGoodwill		36,226,000			2019-12-31	EUR	210000	
InvestmentProperty		270,413,000			2020-12-31	EUR	210000	
InvestmentProperty		195,003,000			2019-12-31	EUR	210000	
InvestmentAccountedForUsingEquityMethod		38,089,000			2020-12-31	EUR	210000	
InvestmentAccountedForUsingEquityMethod		37,742,000			2019-12-31	EUR	210000	
NoncurrentInvestmentsOtherThanInvestmentsAccountedForUsingEquityMethod		8,324,000			2020-12-31	EUR	210000	
NoncurrentInvestmentsOtherThanInvestmentsAccountedForUsingEquityMethod		5,829,000			2019-12-31	EUR	210000	
DeferredTaxAssets		18,456,000			2020-12-31	EUR	210000	
DeferredTaxAssets		17,618,000			2019-12-31	EUR	210000	
NoncurrentDerivativeFinancialAssets		936,000			2020-12-31	EUR	210000	
NoncurrentDerivativeFinancialAssets		1,000			2019-12-31	EUR	210000	
NoncurrentReceivables		10,349,000			2020-12-31	EUR	210000	
NoncurrentReceivables		6,023,000			2019-12-31	EUR	210000	
ext:NonCurrentAssetsRecognisedFromCostsToObtainOrFulfilContractsWithCustomers		222,000			2020-12-31	EUR	210000	
ext:NonCurrentAssetsRecognisedFromCostsToObtainOrFulfilContractsWithCustomers		84,000			2019-12-31	EUR	210000	
NoncurrentAssets		2,378,928,000			2020-12-31	EUR	210000	
NoncurrentAssets		2,219,399,000			2019-12-31	EUR	210000	

Only in the case of .zip .xbri files, the user will also find an Excel sheet for each ESEF financial statement, with the IFRS customary statement names, as ***210000, 32000…610000***. The content and structure of each statement is defined by the reporting company in the XBRL metadata (taxonomy extension linkbases) of its Annual Report. The sheet **Linkbases** visually shows the edited content of all the XBRL linkbases, including *anchoring* (relationship between IFRS concepts and proprietary -extended- concepts).

[00010] - Statement - StatementOfFinancialPosition					
Statement identified as: [210000] Statement of financial position, current/non-current					
EUR	StatementOfFinancialPosition				
Concept		2020-12-31	2019-12-31		Qname
Statement of financial position placeholder - this item MUST be used as a st					StatementOfFinancialPositionAbstract
Assets					AssetsAbstract
Non-current assets					NoncurrentAssetsAbstract
Property, plant and equipment		1,954,096,000	1,878,221,000		PropertyPlantAndEquipment
Right-of-use assets		38,498,000	42,652,000		RightofuseAssets
Total intangible assets and goodwill		39,545,000	36,226,000		IntangibleAssetsAndGoodwill
Investment property		270,413,000	195,003,000		InvestmentProperty
Investments accounted for using equity method		38,089,000	37,742,000		InvestmentAccountedForUsingEquityMethod
Non-current investments other than investments accounted for using e		8,324,000	5,829,000		NoncurrentInvestmentsOtherThanInvestmentsAccountedF
Deferred tax assets		18,456,000	17,618,000		DeferredTaxAssets
Non-current derivative financial assets		936,000	1,000		NoncurrentDerivativeFinancialAssets
Trade and other non-current receivables		10,349,000	6,023,000		NoncurrentReceivables
Non-current assets recognised from costs to obtain or fulfil contracts		222,000	84,000		ext:NonCurrentAssetsRecognisedFromCostsToObtainOr
Non-current assets		2,378,928,000	2,219,399,000		NoncurrentAssets

The sheet **Labels** has the list of *Qnames* (technical names) and English description of all and each one the IFRS elements, corresponding to the current version of the IFRS taxonomy, as well as the deprecated elements of previous IFRS taxonomies. The structure of the elements composing each customary IFRS statement is also visible. Note that the Preferred Labels of type *negated* forces the inversion of the sign of the amount when presented in Excel, in relation from the original sign in the XBRL file.

Apply the ESEF-ERICA mapping

As a starting point, the user can apply the already predefined mapping by the ERICA WG knowledge to the common homogeneous format "ERICA format" in the sheet "Mapping" in the "Predefined mapping area" that consists of the following columns:
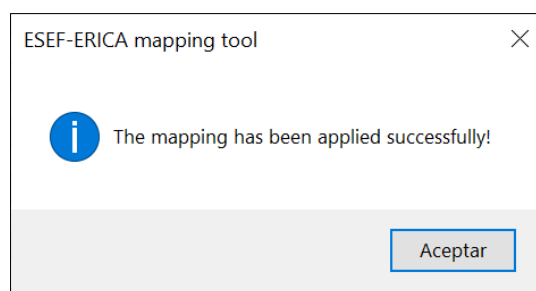
"IFRS - Mapping option 1", "IFRS - Mapping option 2", "IFRS - Mapping option 3", "IFRS - Mapping option 4" and "IFRS - Mapping option 5".

These alternative options try to cover all possible IFRS ESEF XBRL tags (and other implicit options) within the common European format, due to the fact that several XBRL tags could have been chosen by different users to provide the same information.

The next step is to click on the button "Apply mapping".
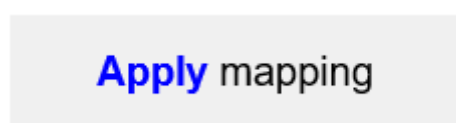
Once the mapping process has finished, the user will see a message like the one below.

After closing the previous message the user will see the pre specified cells of the columns "IFRS - Mapping option 1", "IFRS - Mapping option 2", "IFRS - Mapping option 3", "IFRS - Mapping option 4" and "IFRS - Mapping option 5" highlighted with these colours if any of them is mapped:

GREEN	The mapping has been applied successfully.
ORANGE	The mapping has not been analysed as a previous mapping with more priority has been applied successfully.
RED	It has not been possible to apply the mapping (the concepts specified in the mapping were not found in the ESEF report)

Finally, at the "Facts" sheet the user will be able to analyse which facts have been used in the mapping process (highlighted in green colour) and which facts have not been used in the mapping process (not highlighted), in order to ease the process of the fine tuning. See an example in the image below.

Name	Fact	Notes	PeriodInit	PeriodEnd	UnitRef	Statement	Dimension
PropertyPlantAndEquipment	1,954,096,000			2020-12-31	EUR	210000	
PropertyPlantAndEquipment	1,878,221,000			2019-12-31	EUR	210000	
RightofuseAssets	38,498,000			2020-12-31	EUR	210000	
RightofuseAssets	42,652,000			2019-12-31	EUR	210000	
IntangibleAssetsAndGoodwill	39,545,000			2020-12-31	EUR	210000	
IntangibleAssetsAndGoodwill	36,226,000			2019-12-31	EUR	210000	
InvestmentProperty	270,413,000			2020-12-31	EUR	210000	
InvestmentProperty	195,003,000			2019-12-31	EUR	210000	
InvestmentAccountedForUsingEquityMethod	38,089,000			2020-12-31	EUR	210000	
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NoncurrentInvestmentsOtherThanInvestmentsAccountedForUsingEquityMethod	8,324,000			2020-12-31	EUR	210000	
NoncurrentInvestmentsOtherThanInvestmentsAccountedForUsingEquityMethod	5,829,000			2019-12-31	EUR	210000	
DeferredTaxAssets	18,456,000			2020-12-31	EUR	210000	
DeferredTaxAssets	17,618,000			2019-12-31	EUR	210000	
NoncurrentDerivativeFinancialAssets	936,000			2020-12-31	EUR	210000	
NoncurrentDerivativeFinancialAssets	1,000			2019-12-31	EUR	210000	
NoncurrentReceivables	10,349,000			2020-12-31	EUR	210000	
NoncurrentReceivables	6,023,000			2019-12-31	EUR	210000	
ext:NonCurrentAssetsRecognisedFromCostsToObtainOrFulfilContractsWithCustomers	222,000			2020-12-31	EUR	210000	
ext:NonCurrentAssetsRecognisedFromCostsToObtainOrFulfilContractsWithCustomers	84,000			2019-12-31	EUR	210000	
NoncurrentAssets	2,378,928,000			2020-12-31	EUR	210000	
NoncurrentAssets	2,219,399,000			2019-12-31	EUR	210000	

After clicking the "Apply mapping" button, if the outcome is not fruitful due to some empty CBSO[4] elements in the ERICA Format (due to particular extensions for that group in the Facts sheet available, particular use of signs, combination of official elements not considered in the pre mapping area….), the user, could alternatively define its own mapping in the "Fine-tunning area" in the "Mappings" sheet, in the column "IFRS - Customized mapping option"[5] or to include an "absolute value adjustment"[6] in the columns "Absolute value adjustment [current period]" or "Absolute value adjustment [previous period]", when necessary. The "Apply mapping" button should be then applied again. It is part of an iterative and repeating process, until the outcome is successful regarding the ERICA Sheets.

For defining new manual fine-tuning mappings, please consider reading the Annex 1 – Mapping syntax. Take into consideration that when more than one option of mapping has been defined for a single CBSO code, if available all of them, the following priorities will apply, from more priority (1) to less priority (7):

1. "Absolute value adjustment" (current and previous period)
2. "IFRS - Customized mapping option"
3. "IFRS - Mapping option 1"
4. "IFRS - Mapping option 2"
5. "IFRS - Mapping option 3"
6. "IFRS - Mapping option 4"
7. "IFRS - Mapping option 5"

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[4] Each ERICA element is codified with a CBSO Code or Central Balance Sheet Data Office Code

[5] "IFRS - Customized mapping option": This option can be used by analysts to "fine-tune" the mapping, adding the XBRL tags provided by the reporting company, that is, only formulas with references to IFRS taxonomies or extensions: due to particular (incorrect) uses of the official Taxonomy elements by preparer or unexpected use of signs in the Facts/ESEF report, particular formulas not considered in the pre mapping area, etc. No numbers or other words are allowed but elements' "Qames".

[6] "Absolute Value Adjustment": Again, this option can be used by analysts as a final "fine-tune" option, not using XBRL tags, but including figures or other elements directly. When no formulas, elements or extensions could be considered in the "IFRS-Customized Mapping Option" or ERICA CBSO Code is not mapped with the Official Taxonomy or extended Elements (e.g. so far, environmental information, detailed information not considered in the primary financial statements but included in the notes but without taxonomy such as material or intangible assets impairments or their reversal…), etc.

When there is a fine tuning option filled in (priorities 1 or 2: Absolute value adjustment or Customized mapping), one of the following reasons could be filled in the "IFRS-Fine Tuning Area Comment":

|	
Extension Tag	Specific tag created by the group that must be anchored to an official ESEF taxonomy tag
Incorrect Tag	Incorrect use of official taxonomy tag or extension tag (e.g. another official taxonomy tag more specific for that Primary Financial Statement, mistake or abuse of unnecessary extensions)
Incorrect Sign	Sign reported by the company in the linkbases contrary to the one ESEF taxonomy states
No ESEF Taxonomy	Specific element for the ERICA questionnaire not included in the ESEF report (e.g. environmental information)
Rounding Error	Reporting Primary Financial Statements (PFS) with rounding errors even though they have been validated by OAM.
Notes w/o Tags	Specific element disclosed in the Notes without ESEF tags (taken from disclosure in the notes of the PFS).
Internal Mapping Error	ESEF-ERICA Mapping options for the ERICA Code is incorrect
Order in predefined mapping generates conflict	ESEF-ERICA Mapping options hierarchy generates conflict: e.g. second option should have been used prior to the first one, so analyst is forced to change the order with a customized mapping
Alternative customized mapping (not an extension)	Alternative customized mapping to the premapping options not being an extension considered by the reporting group.
Other Reason	Other Reasons

Import the ESEF-ERICA mapping

If the user already has a text file with the specific ESEF-ERICA mapping for a group, it can be imported directly on the tool going to the sheet "Mapping" and clicking on the button "Import mapping". Those using the tool for the first time should go directly to the previous functionality ("Apply mapping").

The "Import mapping" functionality can be used by those users that have worked previously with the tool for a precise group: a) to upload the customized mapping and other absolute values (quantitative and qualitative data) from previous year; b) to upload the customized mapping of current year, once it has been previously exported[7] (for those users that have done part of the customized mapping and want to improve, change or finish the mapping).
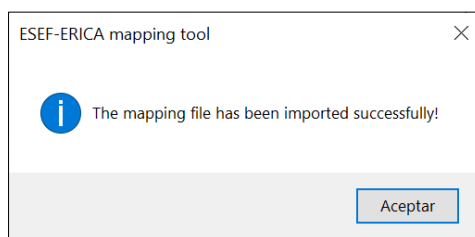
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[7] See next chapter with instructions to export a mapping file.
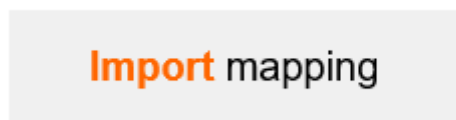
Once the button has been clicked the tool will ask the user for the location of the mapping file. Please, choose the text file with the mapping and click on the "Open" button.
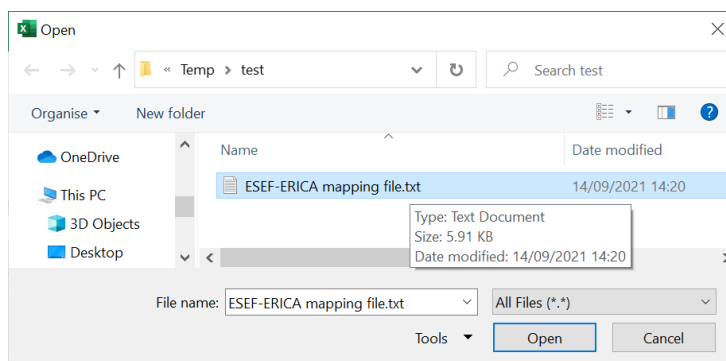
Once the import process has finished the user will see a message like the one at right.


Once applied the (imported) mapping after loading the ZIP file, the user can obtain the figures of the company within the homogeneous template created by the ERICA WG in the "ERICA questionnaire"[8] sheets. Each homogeneous line has its own codification, under the heading "CBSO code" (Central Balance Sheet Data Office code).

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[8] Sheets included in the "ERICA questionnaire": Cover, Content, Gen. Charac., Function, Nature, Comprehensive, Assets, Liabilities & Equity, Cash Flow, Notes, Controls, Help.
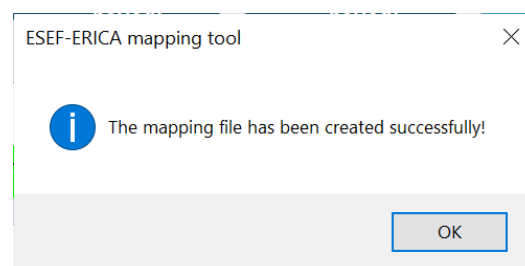
Export the ESEF-ERICA mapping

If the user wants to save in a text file the ESEF-ERICA mapping, it can be exported by the tool going to the sheet "Mapping" and clicking on the button "Export mapping".
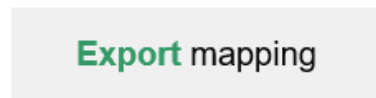
Once the button has been clicked, the tool will ask the user for the location and name of the mapping file. Please, choose a location, a name and click on the "Save" button.
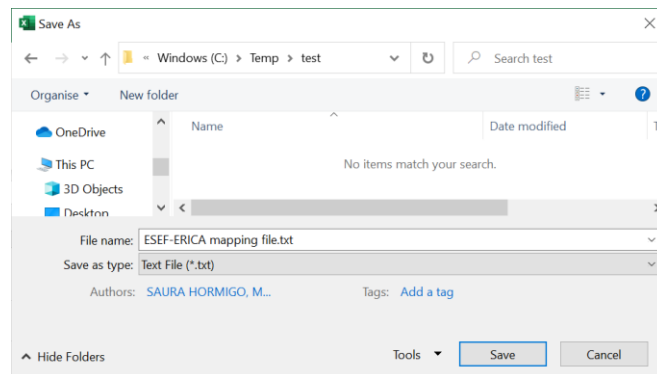
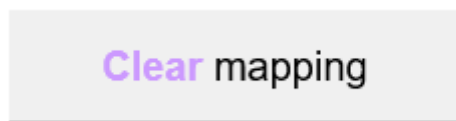Once the export process has finished the user will see a message like the one below.

Finally, the user could save the file with all the data included in it until that moment going to File/Save As/.../name_of_file.xlsb format.
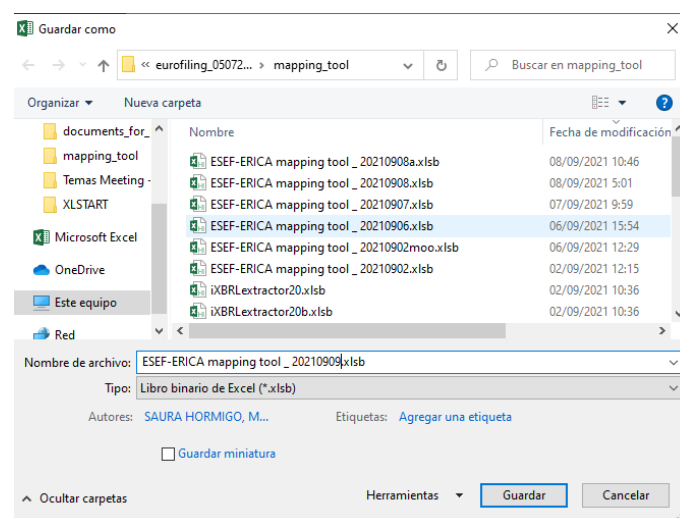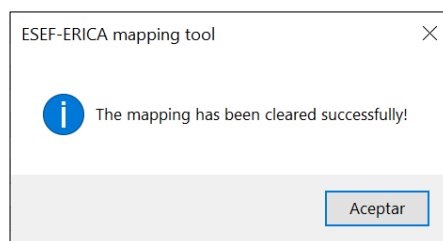
Clear the ESEF-ERICA mapping

If the user wants to clear the current ESEF-ERICA mapping, it can be done going to the sheet "Mapping" and clicking on the button "Clear mapping".
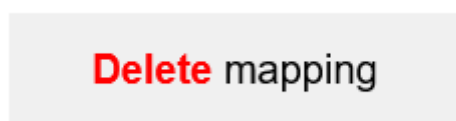

The clear process will delete the values included on the "ERICA questionnaire"[9] sheets and will delete the colours in the background of the cells of the sheet "Mapping". Once the clear process has finished the user will see a message like the one below.

There is other utility in the tool, similar to this one presented, called "Delete mapping". Next paragraph informs about this option. The main difference between the "Clear mapping" and "Delete mapping" buttons is that the "Clear mapping" button continues with the existing mapping while the "Delete mapping" button additionally erases the values and elements in the columns that are included in the "Fine-tunning Area" columns G to J.


Delete the ESEF-ERICA mapping

If the user wants to delete the current ESEF-ERICA mapping, it can be done going to the sheet "Mapping" and clicking on the button "Delete mapping".

The process will delete the values included on the "ERICA questionnaire"[9] sheets and the customized content (Fine-tunning area) of the cells of the sheet "Mapping". Once the process has finished the user will see a message like the one at right.
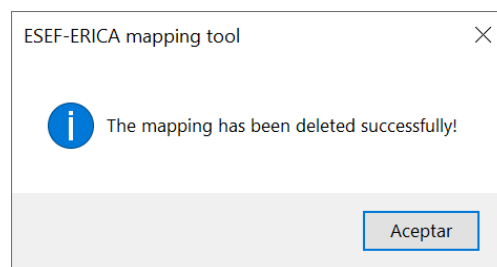
Annex 1 – Mapping syntax

Below you will find examples of the mapping syntax to be used in the columns: "IFRS - Customized mapping option", "IFRS - Mapping option 1", "IFRS - Mapping option 2", "IFRS - Mapping option 3", "IFRS - Mapping option 4", "IFRS - Mapping option 5", of the sheet "Mapping".

For the convenience of ERICA users, and better reading, note the prefix "ifrs-full:" for IFRS elements is optional, and normally omitted. Also note the prefix "ext:" is always used for extension elements, irrespective the original prefix declared in the report.

Example 1. Only one IFRS concept, with or without sign.

> *NameOfUltimateParentOfGroup*

> *- InterestPaidClassifiedAsInvestingActivities*

Example 2. More than one IFRS concept.

> *NoncurrentPayables + CurrentTaxLiabilitiesNoncurrent*
>
> *+OtherNoncurrentFinancialLiabilities - LongtermBorrowings +*
>
> *OtherNoncurrentNonfinancialLiabilities*

Example 3. More than one CBSO concept.

> *cc_50 + cc_51 + cc_54_55_527 + cc_52 - cc_53*

Example 4. Mixed IFRS and CBSO concepts.

> *IntangibleAssetsOtherThanGoodwill - cc_321 - cc_322_323*

Example 5. Only one entity specific extended concept (to be used only in the column "IFRS - Customized mapping option")

> *ext:PagoPorInversiones*

Example 6. More than one entity specific extended concept or IFRS concept (to be used only in the column "IFRS - Customized mapping option")

> *InvestmentProperty + ext:PagoPorInversionesEnOtrosActivosFinancieros +*
>
> *ext:PagoPorInversionesEnEmpresasDelGrupoAsociadasYUnidadesDeNegocio*

Example 7. Mapping the beginning / ending balance of the value of a concept [suffixed as (bb) or (eb) respectively].

> *CashAndCashEquivalents(bb)*
>
> *CashAndCashEquivalents(eb)*