

Technical Reference

easyQC: easy Quality Control for ESEF reports

Abstract

The *easyQC* tool is designed to read, validate and perform quality control of ESEF annual reports. The main purpose is to assist in professional quality control tasks. It can also be used to simply read data from an ESEF report into Excel cells. The running environment is a classic Excel. The *easyQC* tool is [certified](#)¹ by XBRL International as Review & Consumption Software.

Detecting ESEF inconsistencies and how to correct them is a complex task. Expert Systems Technology has been used to include in *easyQC* the heuristic rules of ESEF Quality Control. The rules are according to the [Reporting Manual](#) of ESMA and the expertise of the authors.

The empirical testing of *easyQC* has been performed within [academic research](#) in the repository of over 700 ESEF reports published by XBRL International at filings.xbrl.org

Scope of Application:

Preparer, consultant, and auditor's review. This tool is designed to show observations as warnings and errors that should be checked. A best effort is made to shade the cells with findings. The findings may be due to many different factors and may not even necessarily be errors that need to be corrected. Detecting the ultimate cause of a finding may be complex. For example, the facts are customarily placed into Statements and Notes. If there is a fact that *easyQC* cannot determine in what Statement it should be placed, this may be due to multiple causes.

Read ESEF reports in an easy way. Simply select the file to read. The facts and the financial statements will be show in separate spreadsheets. The [proof-of-concept](#) use case has been the [ERICA](#) working group of balance sheet experts from European central banks.

Installation Requirements

- Microsoft Excel, on Windows or Mac versions.
- Suite Open Source Arelle, [free download](#)

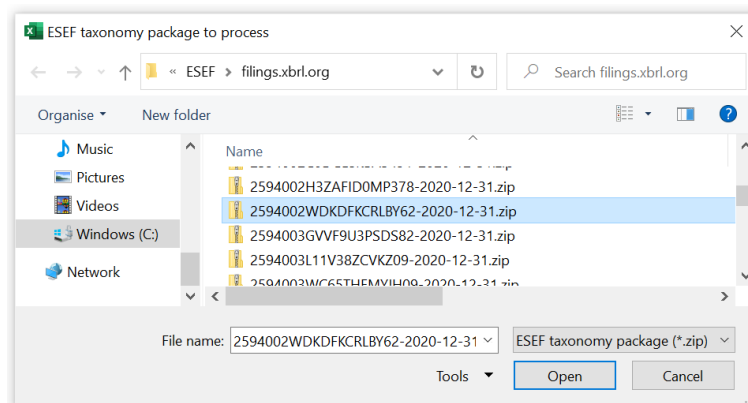
¹ *XBRL Certified Software™* is software that has been inspected by XBRL International for conformance with the XBRL specifications. *Review & Consumption Software* is software that is used to review, analyse, audit or otherwise consume XBRL or iXBRL reports. See details at software.xbrl.org. XBRL™ is a trademark of XBRL International, Inc. All rights reserved. The XBRL™/® standards are open and freely licensed by way of the XBRL International License Agreement. Our use of these trademarks is permitted by XBRL International in accordance with the XBRL International Trademark Policy

How to use easyQC

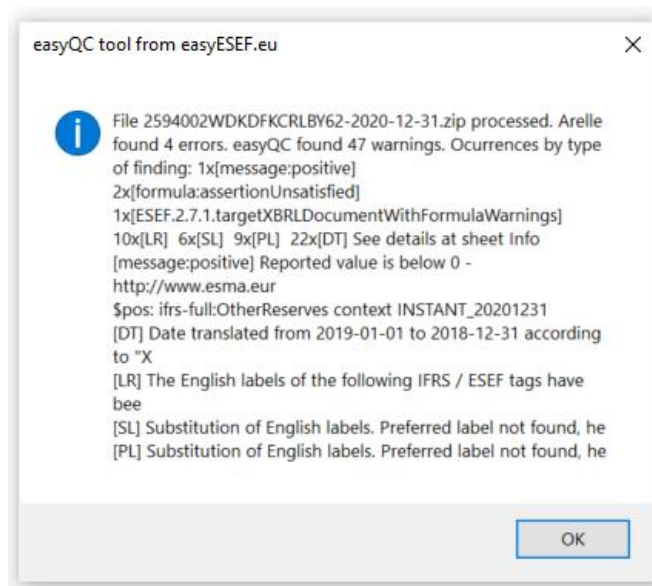
Operation is very simple. First click in the button of the sheet *Facts*.

Click here to run the Reading, Validation (with Arelle) and Quality Control of an ESEF annual Report

Immediately *easyQC* will ask to select the ESEF report to process (taxonomy package file .zip).

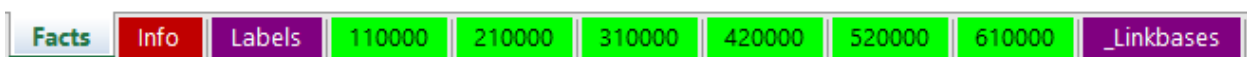


Done!



As a result, each and every reported data is displayed across the following sheets:

- **Facts** with the iXBRL instance data
- **Info** with warnings and errors
- **Labels** and elements of the ESEF taxonomy
- Financial **Statements** and **Notes**
- **_Linkbases** of the extended taxonomy



Sheet Facts

The header lines show general data of the file: *Input path* for the ESEF taxonomy package file, the software that generated it, the name of the iXBRL instance file, the [Legal Entity Identifier](#) and the languages used (ISO 639-1). The scale (millions, thousands, units...), the decimal accuracy ([significant digits](#) in relation to units) and the currency used are also shown.

Each fact is represented in a row with the following columns: Identifier, Name, value (in red if negative), footnotes, beginning and end of period, unit of reference, financial statements where the fact is shown, and the list of applicable dimension/member. Values are shown in units, and with comma separator plus decimal digits where applicable. Footnotes, if any, will be placed in consecutive rows after the rows for facts with some empty rows as separator.

Id	Name	Fact	Notes	PeriodInit	PeriodEnd	UnitRef	Statement
A2d77cc6ae2f	ifrs-full:NoncurrentAssets	162639000		2020-12-31	2020-12-31	PLN	210000
Ab018a929bd	ifrs-full:NoncurrentAssets	166170000		2019-12-31	2020-12-31	PLN	210000
Ac00affb1d4f	ifrs-full:PropertyPlantAndEquipment	95626000		2020-12-31	2020-12-31	PLN	210000
Aab6805f6955	ifrs-full:PropertyPlantAndEquipment	99794000		2019-12-31	2020-12-31	PLN	210000
Aaa3fdc66b9f	inl:RightofuseAssetsLandsBuildingsPremisesAndOtherStructures	21931000		2020-12-31	2020-12-31	PLN	210000
A9432b8f865f	inl:RightofuseAssetsLandsBuildingsPremisesAndOtherStructures	22114000		2019-12-31	2020-12-31	PLN	210000
Aeb421a6b43	inl:RightofuseAssetsOtherAssets	15628000		2020-12-31	2020-12-31	PLN	210000
A950368aa7b	inl:RightofuseAssetsOtherAssets	15391000		2019-12-31	2020-12-31	PLN	210000
A1eb6e3a943	ifrs-full:Goodwill	5332000		2020-12-31	2020-12-31	PLN	210000
A4fd84afa2bc	ifrs-full:Goodwill	5332000		2019-12-31	2020-12-31	PLN	210000

Select another file by re-typing or deleting the Input path (*easyQC* will already ask for one).

Sheet Info

This sheet shows the results, including warnings and errors detected. Where possible, *easyQC* warnings will also be highlighted by shading the corresponding cells, well in the sheet *Facts* or in well the sheets for financial *Statements* and *Notes*.

[INFO] Arelle has detected the following validation errors in the ESEF taxonomy package file C:\ESEF\filings.xbrl.org\2594002WDKDFKRLBY62-2020-12-31.zip
 [ERROR] [ESEF.2.6.1.reportIncorrectlyPlacedInPackage] Inline XBRL document MUST be included within an ESEF report package as defined in http://www.xbrl.org/WGN/report-packages/WGN-201
 [ERROR] [message:positive] Reported value is below 0 - http://www.esma.europa.eu/taxonomy/2019-03-27/esef_cor-for.xml 11079, inl_2020-12-31.xhtml 3264
 [ERROR] [formula.assertionUnsatisfied] positive,
 [ERROR] [ESEF.2.7.1.targetXBRLDocumentWithFormulaWarnings] Target XBRL document SHOULD be valid against the assertions specified in ESEF taxonomy, 1 with warnings. - ./././XDS inl_202

[INFO] Activation of plug-in Validate ESMA ESEF successful, version 1.2020.03. - validate\ESEF. Activation of plug-in Inline XBRL Document Set successful, version 1.1. - inlineXbrlDocumentSet.
 [INFO] validating ESMA RTS on ESEF filing rules 0,110 secs. Gramática para fórmulas xpath2 inicializada en 0,91 segundos -. validado en 3,90 segundos - C:\ESEF\filings.xbrl.org\2594002WDK

[INFO] About arelle arelle® 1.2021.11.03 (64bit). An open source XBRL platform © 2010-2021 Mark V Systems Limited. All rights reserved. Web site: http://www.arelle.org. E-mail support: support@
 [INFO] You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distri
 [INFO] See the License for the specific language governing permissions and limitations under the License. Includes: Python® 3.9.4 © 2001-2010 Python Software Foundation PyParsing © 2003-201

[INFO] Start of easyQC Quality Control for the ESEF taxonomy package file C:\ESEF\filings.xbrl.org\2594002WDKDFKRLBY62-2020-12-31.zip
 [WARNING] [DT] Date translated from 2019-01-01 to 2018-12-31 according to "XBRL 2.1 Recommendation, paragraph 4.7.2 The <period> element". Sheet Facts row/s: 259 362 363 364 365 366
 [WARNING] [LR] The English labels of the following IFRS / ESEF tags have been redefined in the label linkbase/s: [lang=en ifrs-full_NameOfReportingEntityOrOtherMeansOfIdentification] [lang=e
 [WARNING] [ER] The labels for lang=en have been unnecessarily redefined (ESMA already provide translations for all the languages) for the following IFRS / ESEF tags in the label linkbase/s: ifrs-full
 [WARNING] [ML] Missing label for lang=pl for the following element/s in the presentation linkbases of the taxonomy package: [totalLabel ifrs-full_NoncurrentAssets] [totalLabel ifrs-full_CurrentAsse

[INFO] File 2594002WDKDFKRLBY62-2020-12-31.zip processed. Arelle found 4 errors: 1x[ESEF.2.6.1.reportIncorrectlyPlacedInPackage] 1x[message:positive] 1x[formula:asserti

Sheet Labels It shows the elements and labels of the ESEF IFRS taxonomy. Useful for references.

Financial Statements and Notes: Sheets 110000, 210000, 220000....

All the Statements and Notes are presented, each one in its own Excel sheet, according to the information available in the linkbases. In the dimensional Statements, *easyQC* decides the distribution of dimensions in rows and columns: The surface to be shown (number of rows multiplied by the number of columns) is minimised, for easier reading.

The preparers of ESEF reports have very different ways of numbering each financial statement. **easyQC** uses the IFRS notation as 110000, 210000, 220000.... after a best effort of classification (*heuristic weighted pseudo-distance of Mahalanobis to the ESEF/IFRS taxonomy pattern*).

		Equity						
		Issued capital	Share premium	Other reserves	Retained earnings	Equity attributable to owners of parent	Non-controlling interests	Total
2019.01.01 to 2019.12.31		Retrospective application and retrospective restatement						
Equity at beginning of period	Previously stated	5328000	49344000	653000	65376000	120701000	3145000	123846000
Equity at beginning of period	Increase (decrease)	0	0	0	1381000	1381000	0	1381000
Equity at beginning of period		5328000	49344000	653000	66757000	122082000	3145000	125227000
Changes in equity								
Comprehensive income								
Profit (loss)		0	0	0	8763000	8763000	811000	9574000
Other comprehensive income		0	0	903000	0	903000	0	903000
Total comprehensive income		0	0	903000	8763000	9666000	811000	10477000
Dividends recognised as distributions to owners		0	0	0	-2091000	-2091000	-158000	-2249000

Sheet_Linkbases

The presentation, calculation, labels and definition linkbases are shown. Anchoring and extended elements are also shown. Having a representation of the linkbases is useful to analyse the full context of the quality control observations found.

	A	B	C	D	E	F	G	H	I	J	K	L	M
7	Definition linkbase (anchoring)			[210000]		Statement of financial position, current/non-current							
8	ias_1_role-210000												File: inl_2020-12-31\www.introlsa.pl\xml\2020-12-31\inl-2020-12-
9	Wider element						Narrower element						
10	ifrs-full_RightofuseAssetsThatDoNotMeetDefinitionOfInvestmentProperty						in_RightofuseAssetsLandsBuildingsPremisesAndOtherStructures						
11	ifrs-full_RightofuseAssetsThatDoNotMeetDefinitionOfInvestmentProperty						in_RightofuseAssetsOtherAssets						
12	ifrs-full_NoncurrentLeaseLiabilities						in_NoncurrentLeaseLiabilitiesLandsBuildingsPremisesAndOtherStructur						
13	ifrs-full_NoncurrentLeaseLiabilities						in_NoncurrentLeaseLiabilitiesOtherAssets						
14	ifrs-full_CurrentLeaseLiabilities						in_CurrentLeaseLiabilitiesLandsBuildingsPremisesAndOtherStructures						
15	ifrs-full_CurrentLeaseLiabilities						in_CurrentLeaseLiabilitiesOtherAssets						

To know more

For more detailed information and questions on **easyQC**, please contact info@easyESEF.eu

In addition to this tool, highly specialized support for error identification and correction is available. This service is independent of any provider and is applicable to any ESEF generation software. See also our other tools for ESEF at easysesef.eu/resources

FAQ:

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easyQC uses the Microsoft XML parser, which is already enabled in the IDE Tools References panel. **easyQC** calls Arelle internally, hence no user intervention is required. **easyQC** creates and deletes the temporal *WorkFolder* in the same folder where it is running.

Running Excel and/or downloading Arelle may require security authorizations in your Entity.