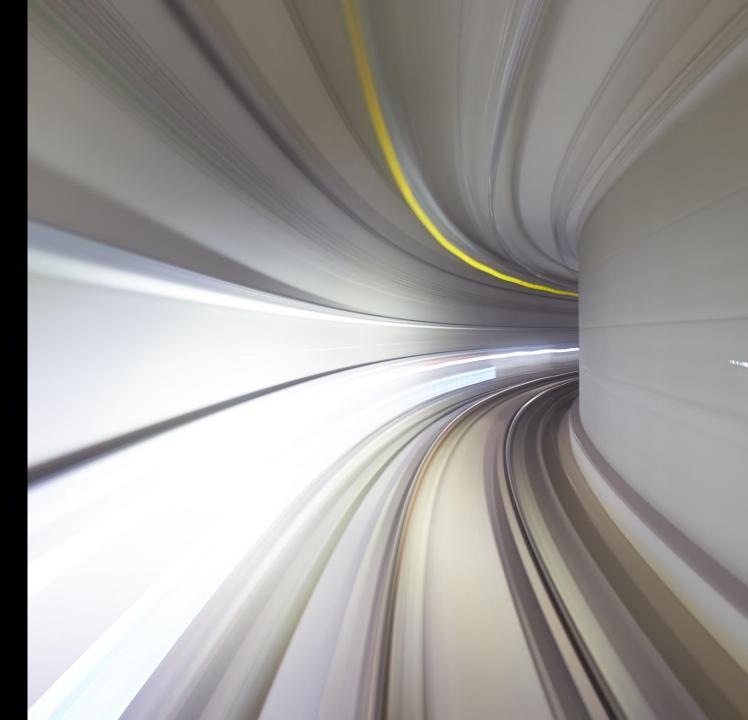
Automated report generation Optimize the last mile of your reporting process

Reporting and ESEF solutions



AMANA

AMANA overview

Product group - Tax Portal

GlobalTaxCenter (GTC)

EU directive on cross-border tax arrangements (DAC 6) module

VAT@GTC

Country-by-Country Reporting (CbCR) module

Product group - Accounting and Reporting

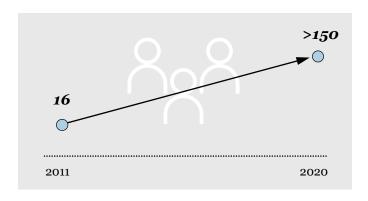
SmartNotes (SN)

GlobalLeaseCenter (GLC)

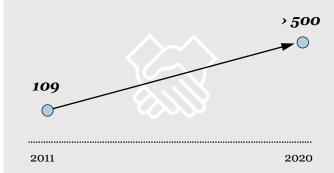
SmartNotesFactory

XBRL product family/ESEF

Employees

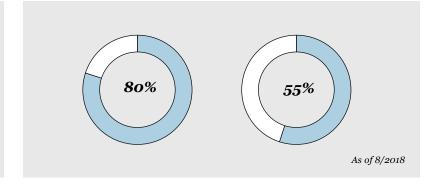


Clients

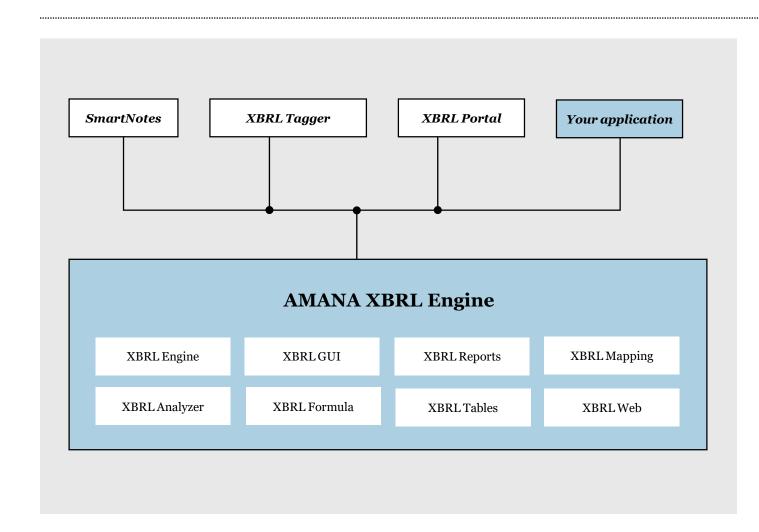


DAX

MDAX



XBRL work streams



- AMANA has a long history of XBRL developments and projects. Our XBRL software is used by hundreds of entities across Europe to generate and process thousands of XBRL reports every year.
- AMANA XBRL experts are involved in international working groups and organizations to enhance the XBRL specifications and reporting requirements.
- The AMANA XBRL Engine is a certified XBRL processing software, that can handle any XBRL taxonomy.

FMA

The Liechtenstein Financial Market Authority collaborates with AMANA in many areas.

"For us, AMANA is first and foremost an XBRL specialist with in-depth XBRL expertise and a global reach. This expertise, which is based on many years of XBRL experience, was crucial for us and the key factor for project success."

Roger Guntli

FMA, Head of IT/Projects Deputy Head of Central Services Financial Market Authority Liechtenstein

https://software.xbrl.org/

Read, Tag, Write, and Validate XBRL Reports

```
XbrlTaxonomy taxonomy = p.ReadXbrlTaxonomy(filename: "http://www.esma.europa.eu/taxonomy/2019-03-27/esef_all.xsd");
XmlDocument doc = new XmlDocument();
doc.Load(filename: "annual-report.xhtml");
InlineXbrlInstanceGenerator inlineGenerator = new InlineXbrlInstanceGenerator(p, doc, taxonomies: new List<XbrlTaxonomy> { taxonomy });
Unit unit = inlineGenerator.GetOrAddUnit(measure: new XmlQualifiedName("EUR", ns: XbrlBaseConstants.Iso4217));

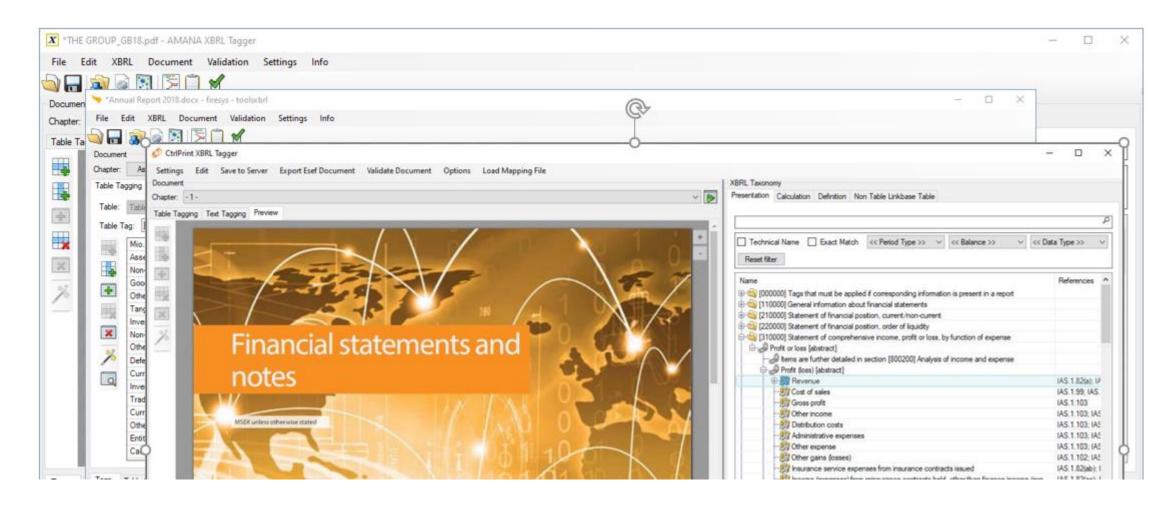
Element element = taxonomy.GlobalElements["ifrs-full:ProfitLoss"];
Context context = inlineGenerator.AddContext(element, identifier: "AMANA", identifierSchema: "LEI", startDate: new DateTime(year: 2017, month: 1, day: 1), endDate: new DateTime(year: 2017, month: 12, day: 31));
XmlElement factNode = doc.SelectNodes(xpath: "//xhtml:td/xhtml:p/xhtml:span", inlineGenerator.InlineXbrlDocument.NamespaceManager)?[7] as XmlElement;
inlineGenerator.TagNonFractionItem(factNode, element, context, unit, decimals: -6, scale: 6);
```

```
FilingRulesValidator filingRulesValidator = new FilingRulesValidator();
filingRulesValidator.LoadRules(regulators: Regulator.ESMA, validateInstanceName: false);
filingRulesValidator.Validate(inlineGenerator.InlineXbrlDocument);
```

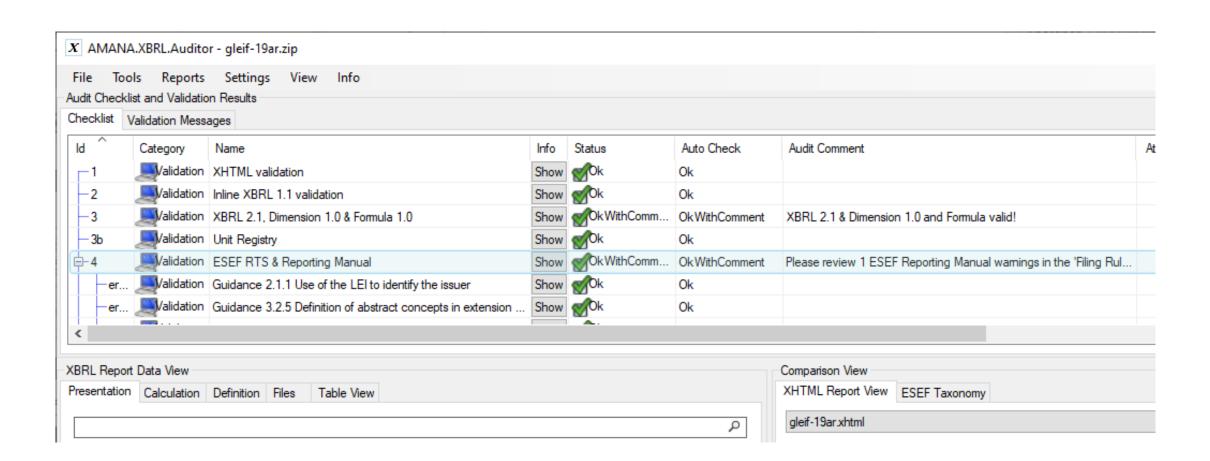
```
XbrlDocument doc = _processor.LoadXbrlDocument(filename:@"c:\xbrl_report.xbrl");
doc.ValidateIncludingFormula(validateTaxonomies: true, verbose: true, attachResultsToFacts: true);
```



Partners using the XBRL Tagger



Audit firms are doing ESEF assurance with the Auditor



Financial Authorities using AMANAs tools







XBRL Tagger vs. Disclosure Manager SmartNotes

	XBRL Tagger	Smart- Notes
	Desktop	Client/- Server
Number of concurrent users working on one report	i	∞
XBRL Functionalities		
Certified (i)XBRL processor	х	х
Taxonomy extensions	x	х
Microsoft Word tagging	x	х
PDF HTML InDesign tagging	x	
AI supported auto tagger	х	х
Webpage-Ready-Export	х	х
XBRL tagging roll-forward	х	X

Disclosure Management Functionalities		
Support for multilingual reports including number formatting	x	х
Integrated disclosure checklist	x	х
Content management based on Microsoft Office		х
Report roll-forward (numbers, manual adjustments, notes & comments)		х
Different types of output documents (e.g. Word, Excel, PowerPoint, HTML, iXBRL, XBRL, InDesign, etc.)		х
Linking & automatic update of values from data sources (e.g. SAP, HFM, LucaNet, etc.)		х
Individual workflow system		х
"Layout Robot" for the automated production of glossy and ready-to-print reports		х
Detailed authorisation system and full audit trail		x

XBRL Tagger

XBRL Tagger Live Demo



XBRL Tagger Testimonials

ARKK SOLUTIONS

"Arkk use AMANA's software to provide an outsourced iXBRL tagging service. The software is easy to use and intuitive for both the user and the reviewer. The team at AMANA have been very responsive with incorporating feedback into the software and have been great to work with. We have received some super feedback on the iXBRL output from a number of our clients, especially around the ease of review."

Jenny Himsley, CFO Arkk solutions

CTRLPRINT

"We have successfully integrated AMANA's XBRL Tagger, a certified XBRL solution, into CtrlPrint to enable our corporate users to make their financial reports ESEF-ready in a fast and effective way. In our tagging sessions in December 2019, 30 listed companies were able, to a very large extent, tag previous year's annual report and create iXBRL reports as a perfect basis for the 2020 report, fulfilling ESMA requirements. Our users, who in general are not familiar with XBRL, were impressed by the easy-to-use functionality of AMANA's XBRL Tagger and the way it played down ESEF/XBRL to something more familiar.

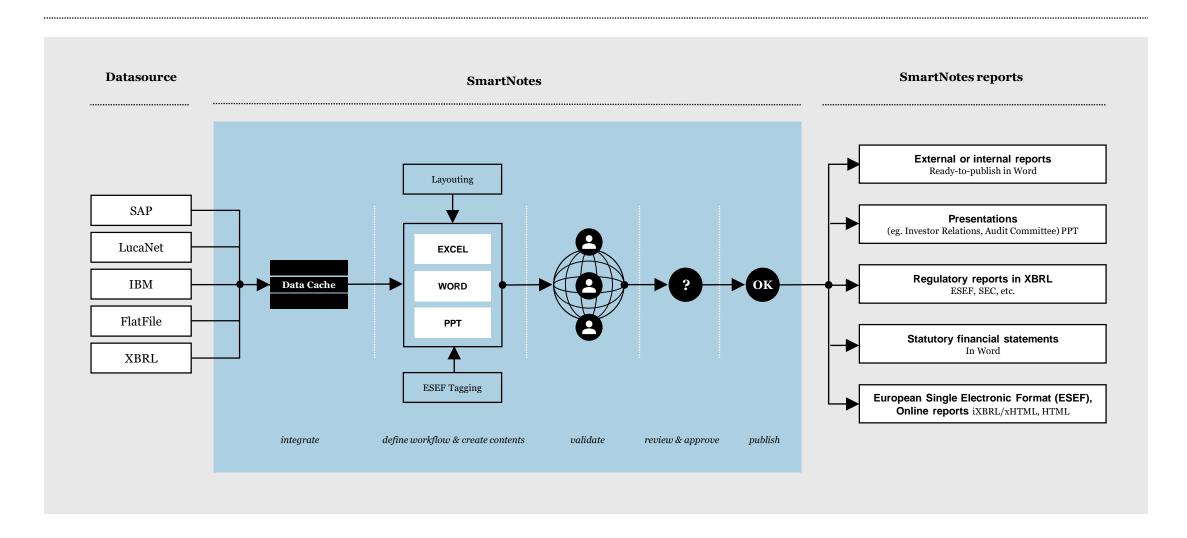
We are convinced that it is a perfect addition to our report collaboration tool."

Karl Magnus Westerberg CtrlPrint



SmartNotes – Disclosure Management

SmartNotes rises to the challenge



AMANA XBRL and SmartNotes Clients



Your contact



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M + 49 162 25 885 75

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