

# Panorama of SHS and Anacredit reporting in Europe

# Anacredit

- *Analytical credit datasets : ECB project, launched in 2011*
  - *Detailed information on individual bank loans in the euro area that exceed 25 000€*
    - Reported monthly to quarterly from NCBs to ECB
  - *Regulation 2016/867*
  - *First filings in 2018*



## Tables defined by ECB

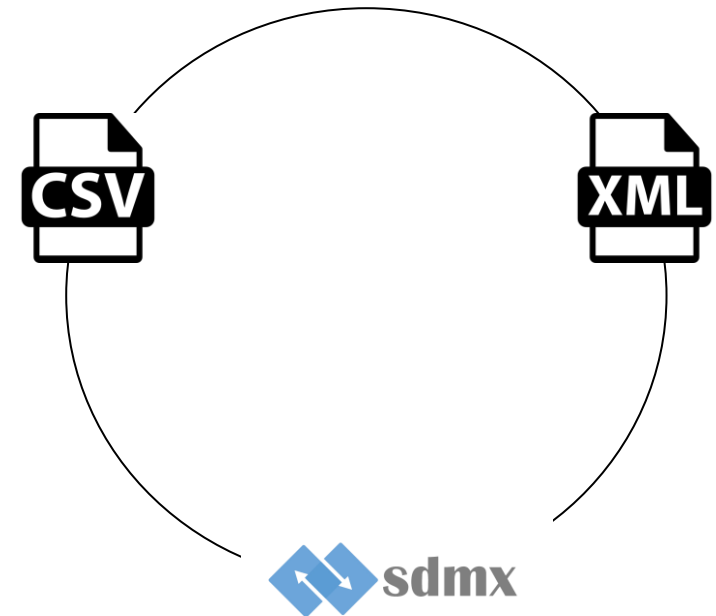
Table id	Table name	Frequency	Template code	Variable Type
1	Counterparty Reference	Monthly	T1M	Static Data
2	Instrument	Monthly	T1M	Static Data
3	Financial	Monthly	T1M	Dynamic Data
4	Counterparty - Instrument	Monthly	T1M	Static Data
5	Joint Liabilities	Monthly	T1M	Dynamic Data
6	Accounting	Quarterly	T2Q	Static Data
7	Protection Received	Monthly	T2M	Dynamic Data
8	Instrument – Protection Received	Monthly	T2M	Dynamic Data
9	Counterparty Risk	Monthly	T2M	Dynamic Data
10	Counterparty Default	Monthly	T2M	Dynamic Data

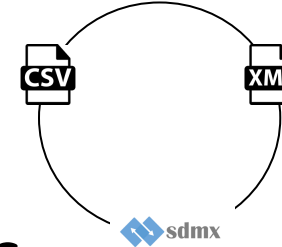
- *Most countries use directly the ECB datasets, sometimes with small variations*
    - *Italy, France, Ireland, Luxembourg: Original datasets structure*
    - *Estonia: Subtyping counterparties resident/non resident*
    - *Germany, Finland, Belgium: Dataset « Protection – Protection provider »*
      - *Forthcoming add by ECB to identify possible multiple protection providers for the same protection*
-

- *Netherlands: Use of normalized datasets*
  - *Normalization*
    - *E.g. Link from Counterparty table to an Address table, all other address fields removed from Counterparty*
  - *Logical data model : ~100 tables*
  - *Implementation model : ~50 tables*
    - *Obtained from LDM via Subtyping*
      - *For example, Counterparty resident / non resident tables disappear, replaced by an attribute resident/non resident*

Datasets to report
accounting_data.csv
address.csv
collateral_located_in_a_reporting_member_state.csv
contract.csv
counterparty.csv
credit_card_debt_instrument.csv
credit_lines_other_than_revolving_credit_instrument.csv
creditor_instrument_data.csv
current_account_instrument_with_credit_limit.csv
debtor.csv
...
observed_agent_delivery.csv
originator_secured_instrument_data.csv
other_loans_instrument.csv
overdraft_instrument.csv
part_of_legal_entity.csv
protection_provider.csv
protection_provider_default_data.csv
protection_provider_risk_data.csv
protection_provider_protection_received.csv
protection_received.csv
recognised_instrument.csv
reporting_agent_delivery.csv
revolving_credit_other_than overdrafts_and_credit_card_debt_instrument.csv
servicer_instrument_data.csv
syndicated_contract_member.csv

- *Reporting format*
  - *3 main formats*
    - *Custom XML*
      - *Austria, Estonia, Finland, France, Ireland, Malta...*
    - *SDMX*
      - *Germany, Italy, Luxembourg...*
    - *CSV*
      - *Czech Republic, Netherlands...*





- *Custom XML: Focus on Counterparties*

```
<CounterpartyReferenceRecords>
  <CounterpartyReferenceRecord Action="Replace" CNTRPRTY_ID="FI90816598">
    <LEI>743700JL044GTA1HMY62</LEI>
    <ENTTY_ID_TYP>FI_Y_CD</ENTTY_ID_TYP>
    <ENTTY_NTNL_ID>9081659-8</ENTTY_NTNL_ID>
    <NM_ENTTY>Mantsinen Group Ltd Oy</NM_ENTTY>
    <Address>
      <STRT>Välrikankaantie 3</STRT>
      <CTY>YLÄMYLLY</CTY>
      <PSTL_CD>80400</PSTL_CD>
      <CNTRY>FI</CNTRY>
    </Address>
    <LGL_FRM>FI12</LGL_FRM>
    <INSTTTNL_SCTR>11102</INSTTTNL_SCTR>
    <ECNMC_ACTVTY>28220</ECNMC_ACTVTY>
    <LGL_PRCDNG_STTS>1</LGL_PRCDNG_STTS>
    <DT_INTTN_LGL_PRCDNGS>1900-01-01</DT_INTTN_LGL_PRCDNGS>
    <ENTRPRS_SZ_DT_ENTRPRS_SZ>2015-12-31</ENTRPRS_SZ>
    <NMBR_EMPLYS>67</NMBR_EMPLYS>
    <BLNC_SHT_TTL>183243.53</BLNC_SHT_TTL>
    <ANNL_TRNVR>65613.43</ANNL_TRNVR>
  </CounterpartyReferenceRecord>
</CounterpartyReferenceRecords>
```

Finland

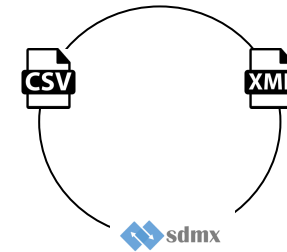
```
</cbi:Identifiers>
<cbi:Name>cbi:Name</cbi:Name>
<cbi:Address Date="2001-01-01">
  <cbi:Street>cbi:Street</cbi:Street>
  <cbi:City>cbi:City</cbi:City>
  <cbi:IrishCounty>cbi:IrishCounty</cbi:IrishCounty>
  <cbi:CountyAdminDivision>cbi:CountyAdminDivision</cbi:CountyAdminDivision>
  <cbi:PostalCode>cbi:PostalCode</cbi:PostalCode>
  <cbi:Country>cbi:Country</cbi:Country>
</cbi:Address>
<cbi:LegalForm>cbi:LegalForm</cbi:LegalForm>
<cbi:InstitutionalSector>cbi:InstitutionalSector</cbi:InstitutionalSector>
<cbi:EconomicActivity>cbi:EconomicActivity</cbi:EconomicActivity>
<cbi:StatusOfLegalProceedings Date="2001-01-01">1</cbi:StatusOfLegalProceedings>
<cbi:EnterpriseSize Date="2001-01-01">cbi:EnterpriseSize</cbi:EnterpriseSize>
<cbi:NumberOfEmployees Date="2001-01-01">14</cbi:NumberOfEmployees>
<cbi:BalanceSheetTotal Date="2001-01-01">123235.89</cbi:BalanceSheetTotal>
<cbi:AnnualTurnover Date="2001-01-01">142354.69</cbi:AnnualTurnover>
<cbi:AccountingStandard>cbi:AccountingStandard</cbi:AccountingStandard>
</cbi:CounterParty>
</cbi:CounterPartyList>
```

Ireland

```
<t1m:AncrdtCtrprty>
  <t1m:Obs>
    ENTTY_ID="GED010024AZN8118MPG"
    LGL_ENTTY_ID=""
    NTNL_ID="829729292"
    TYP_NTNL_ID="FR_SIREN_CD"
    DESCR_OTHER=""
    ORG_INT=""
    CODE_OPC=""
    CODE_OT=""
    CODE_AMF=""
    SIREN_BDF=""
    HD_OFF_UNDRTKG_ID=""
    IMMDT_PRT_UNDRTKG_ID="GED010024AZN8118MPG"
    ULT_PRT_UNDRTKG_ID="GED010024AZN8118MPG"
    NAME="CAPAMAG"
    ADDR_STRT="12 BOULEVARD BLUM"
    ADDR_CTY="SALON DE PROVENCE"
    ADDR_DPT="FR824"
    ADDR_PSTCD="13300"
    ADDR_CNTRY="FR"
    LGL_FRM="FR5710"
    INSTTNL_SCTR="S11"
    ECNMC_ACTVTY="47_71"
    STS_LGL_PRCDNG="1"
    DT_INTLGL_PRCDNG=""
    ENTRPRSE_SZE="3"
    DT_ENTRPRSE_SZE="1998-09-10"
    NMBR_EMPLY="31"
    BLNC_SHT_TL="2344399"
    ANL_TRNOVR="25365265"
    ACCNTG_STNDRD="1"
```

France

- *Comparaison SDMX*
  - *Counterparty Reference schema*



```

<xs:attribute type="ecbfmt:FLL_YYYY_MM_DD" name="DT_INTTN_LGL_PRCNGS">
  <xs:annotation>
    <xs:documentation xml:lang="en">Date of initiation of legal proceedings</xs:documentation>
  </xs:annotation>
</xs:attribute>
<xs:attribute type="bclcnstrnt:BCL_SZ_ANCRDT" name="ENTRPRS_SZ">
  <xs:annotation>
    <xs:documentation xml:lang="en">Enterprise size</xs:documentation>
  </xs:annotation>
</xs:attribute>
<xs:attribute type="ecbfmt:FLL_YYYY_MM_DD" name="DT_ENTRPRS_SZ">
  <xs:annotation>
    <xs:documentation xml:lang="en">Date of enterprise size</xs:documentation>
  </xs:annotation>
</xs:attribute>
<xs:attribute type="ecbfmt:RL_NN_NGTV_2D" name="NMBR_EMPLYS">
  <xs:annotation>
    <xs:documentation xml:lang="en">Number of employees</xs:documentation>
  </xs:annotation>
</xs:attribute>

```

Luxembourg

```

<xs:attribute name="LGL_PRCNG_STTS_DT" type="BBKCommonTypes:BBK_FLL_YYYY_MM_DD_NA"/>
<xs:attribute name="ENTRPRS_SZ" type="bc1:CL_BBK_SZ_NA"/>
<xs:attribute name="ENTRPRS_SZ_DT" type="BBKCommonTypes:BBK_FLL_YYYY_MM_DD_NA"/>
<xs:attribute name="NMBR_EMPLYS" type="bbkCommonTypes:bbk_NN_NGTV_2D_NA"/>

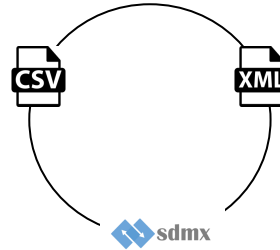
```

Germany



# Anacredit

- *Comparaison SDMX – Instrument schema*



```
<xs:attribute type="bclfrmt:BCL_RSTRICTD_ID_60" use="required" name="CNTRCT_ID">
  <xs:annotation>
    <xs:documentation xml:lang="en">Contract identifier</xs:documentation>
  </xs:annotation>
</xs:attribute>
<xs:attribute type="bclfrmt:BCL_RSTRICTD_ID_60" use="required" name="INSTRMNT_ID">
  <xs:annotation>
    <xs:documentation xml:lang="en">Instrument identifier</xs:documentation>
  </xs:annotation>
</xs:attribute>
<xs:attribute type="ecbcnstrnt:TYP_INSTRMNT_ANCRDT_CLLCTN" name="TYP_INSTRMNT">
  <xs:annotation>
    <xs:documentation xml:lang="en">Type of instrument</xs:documentation>
  </xs:annotation>
</xs:attribute>
```

Luxembourg

```
<xs:attribute name="CNTRCT_ID" type="ECBCommonTypes:ECBSDD_RSTRICTD_ID_60" use="required"/>
<xs:attribute name="INSTRMNT_ID" type="ECBCommonTypes:ECBSDD_RSTRICTD_ID_60" use="required"/>
<xs:attribute name="TYP_INSTRMNT" type="ecl:CL_ECBSDD_TYP_INSTRMNT_ANCRDT_CLLCTN"/>
<xs:attribute name="TYP_AMRTSTN" type="ecl:CL_ECBSDD_TYP_AMRTSTN_ANCRDT_CLLCTN"/>
<xs:attribute name="CRRNCY_DNMNTN" type="bcl:CL_BBK_ISO4217"/>
<xs:attribute name="FDCRY" type="ecl:CL_ECBSDD_FDCRY_ANCRDT_CLLCTN"/>
<xs:attribute name="DT_INCPNT" type="ECBCommonTypes:ECBSDD_FLL_YYYY_MM_DD"/>
<xs:attribute name="DT_END_INTRST_ONLY" type="BBKCommonTypes:BBK_FLL_YYYY_MM_DD_NA"/>
<xs:attribute name="INTRST_RT_CP" type="BBKCommonTypes:BBK_ALL_6D_NA"/>
<xs:attribute name="INTRST_RT_FLR" type="BBKCommonTypes:BBK_ALL_6D_NA"/>
<xs:attribute name="INTRST_RT_RST_FRQNCY" type="bcl:CL_BBK_FRQNCY_INTRST_RT_RST_ANCRDT_CLLCTN_NA"/>
<xs:attribute name="INTRST_RT_SPRD" type="BBKCommonTypes:BBK_ALL_6D_NA"/>
<xs:attribute name="TYP_INTRST_RT" type="bcl:CL_BBK_TYP_INTRST_RT_ANCRDT_CLLCTN_NA"/>
<xs:attribute name="DT_LGL_FNL_MTRTY" type="BBKCommonTypes:BBK_FLL_YYYY_MM_DD_NA"/>
<xs:attribute name="CMTMNT_INCPNT" type="BBKCommonTypes:BBK_NN_NGTV_2D_NA"/>
<xs:attribute name="PYMNT_FRQNCY" type="ecl:CL_ECBSDD_FRQNCY_PYMNT_ANCRDT_CLLCTN"/>
<xs:attribute name="PRJCT_FNNC_LN" type="ecl:CL_ECBSDD_PRJCT_FNNC_LN_ANCRDT_CLLCTN"/>
<xs:attribute name="PRPS" type="ecl:CL_ECBSDD_PRPS_ANCRDT_CLLCTN"/>
<xs:attribute name="RCRS" type="ecl:CL_ECBSDD_RCRSE_ANCRDT_CLLCTN"/>
<xs:attribute name="RFRNC_RT" type="bcl:CL_BBK_RFRNC_RT_ANCRDT_CLLCTN_NA"/>
<xs:attribute name="DT_STLLMNT" type="BBKCommonTypes:BBK_FLL_YYYY_MM_DD_NA"/>
<xs:attribute name="SBRDNTD_DBT" type="ecl:CL_ECBSDD_SBRDNTD_DBT_ANCRDT_CLLCTN"/>
<xs:attribute name="SYNDCTD_CNTRCT_ID" type="BBKCommonTypes:BBK_RSTRICTD_ID_60_NA"/>
<xs:attribute name="RPYMNT_RGHTS" type="ecl:CL_ECBSDD_RPYMNT_RGHTS_ANCRDT_CLLCTN"/>
<xs:attribute name="FV_CHNG_CR_BFR_PRCHS" type="BBKCommonTypes:BBK_NN_NGTV_2D_NA"/>
<xs:attribute name="type" type="common:IDType" use="prohibited"/>
<xs:attribute name="REPORTING_YEAR_START_DAY" type="xs:gMonthDay" use="prohibited"/>
```

Germany

```
<xs:attribute name="CRRNCY_DNMNTN" type="STRING_MAX_LENGTH_3" use="required" />
<xs:attribute name="CNTRCT_ID" type="REGEX_STRING_MAXLEN_60" use="required" />
<xs:attribute name="DT_STLLMNT" type="DATE_YYYY_MM_DD" use="required" />
<xs:attribute name="INTRST_RT_FLR" type="DECIMAL_MAX_10_FRACTION_6" />
<xs:attribute name="INSTRMNT_ID" type="REGEX_STRING_MAXLEN_60" use="required" />
<xs:attribute name="DT_END_INTRST_ONLY" type="DATE_YYYY_MM_DD" />
<xs:attribute name="TYP_INSTRMNT" type="ECBSDD_TYP_INSTRMNT_ANCRDT_CLLCTN" use="required" />
<xs:attribute name="FDCRY" type="ECBSDD_FDCRY_ANCRDT_CLLCTN" use="required" />
<xs:attribute name="FV_CHNG_CR_BFR_PRCHS" type="INTEGER_MAX_LENGTH_15" />
<xs:attribute name="INTRST_RT_CP" type="DECIMAL_MAX_10_FRACTION_6" />
<xs:attribute name="RCRS" type="ECBSDD_RCRSE_ANCRDT_CLLCTN" use="required" />
<xs:attribute name="SBRDNTD_DBT" type="ECBSDD_SBRDNTD_DBT_ANCRDT_CLLCTN" use="required" />
<xs:attribute name="PRJCT_FNNC_LN" type="ECBSDD_PRJCT_FNNC_LN_ANCRDT_CLLCTN" use="required" />
<xs:attribute name="SYNDCTD_CNTRCT_ID" type="REGEX_STRING_MAXLEN_60" use="required" />
<xs:attribute name="INTRST_RT_CHRG" type="DECIMAL_MAX_10_FRACTION_6" />
<xs:attribute name="PRPS" type="ECBSDD_PRPS_ANCRDT_CLLCTN" use="required" />
<xs:attribute name="DT_LGL_FNL_MTRTY" type="DATE_YYYY_MM_DD" use="required" />
<xs:attribute name="TYP_INTRST_RT" type="ECBSDD_TYP_INTRST_RT_ANCRDT_CLLCTN" use="required" />
<xs:attribute name="PYMNT_FRQNCY" type="ECBSDD_FRQNCY_PYMNT_ANCRDT_CLLCTN" />
<xs:attribute name="INTRST_RT_RST_FRQNCY" type="ECBSDD_FRQNCY_INTRST_RT_RST_ANCRDT_CLLCTN" use="required" />
<xs:attribute name="RFRNC_RT" type="ECBSDD_RFRNC_RT_ANCRDT_CLLCTN" use="required" />
<xs:attribute name="INTRST_RT_SPRD" type="DECIMAL_MAX_10_FRACTION_6" use="required" />
<xs:attribute name="CMTMNT_INCPNT" type="INTEGER_MAX_LENGTH_15" use="required" />
<xs:attribute name="DT_INCPNT" type="DATE_YYYY_MM_DD" use="required" />
<xs:attribute name="TYP_AMRTSTN" type="ECBSDD_TYP_AMRTSTN_ANCRDT_CLLCTN" />
<xs:attribute name="RPYMNT_RGHTS" type="ECBSDD_RPYMNT_RGHTS_ANCRDT_CLLCTN" use="required" />
<xs:attribute name="type" type="common:IDType" use="prohibited"/>
<xs:attribute name="REPORTING_YEAR_START_DAY" type="xs:gMonthDay" use="prohibited"/>
```

Italy

- *Securities Holding Statistics*

- *Detailed information on securities held by euro area resident sectors*

- Reported monthly to quarterly from NCBs and some Banking Groups to ECB

- *Regulation 1011/2012 and 2016/1384*

- *First filings in 2018*



- *Custom XML: Different names*

```
<dataSegment id="OBSERVATION">  
  <cube id="SHSG_7003006" lastObsId="0" xmlns="http://www.bankitalia.it/bolina/common/vo/cube">  
    <obs id="0">  
      <dim name="DATA_CONTABILE" value="20180331"/>  
      <dim name="DT_PRFRMNG_STTS_SHSG" value="2014-10-31"/>  
      <dim name="FRBRNC_STTS" value="0"/>  
      <dim name="PROBABILITY_OF_DEFAULT" value="1"/>  
      <dim name="LGD_NRML" value="0.45"/>  
      <dim name="LGD_DWNTRNS" value="0.57"/>  
      <dim name="ISIN" value="XXXXXXXXXXXX"/>  
      <dim name="DFLT_STTS_ISSR" value="20"/>  
      <dim name="DFLT_STTS_INSTRMNT" value="20"/>  
      <dim name="VOCESOTVOC" value="7003006"/>  
      <dim name="INTRA_GROUP_PRUD_SCOPE" value="N"/>  
      <dim name="INTRA_GROUP_ACC_SCOPE" value="N"/>  
      <dim name="RSK_WGHT" value="-1"/>  
      <dim name="PRFRMNG_STTS" value="1"/>  
      <dim name="DT_FRBRNC_STTS_SHSG" value="0001-01-01"/>  
      <dim name="DT_DFLT_STTS_ISSR_SHSG" value="2014-10-31"/>  
      <dim name="DT_DFLT_STTS_INSTRMNT_SHSG" value="2014-10-31"/>  
      <dim name="ENTE_SEGN" value="50324"/>  
    </obs>  
  </cube>  
</dataSegment>
```

Italy

```
<Item>  
  <Dim prop="SEQ">147</Dim>  
  <Dim prop="GROUP_LEI">96950001WI712W7PQG45</Dim>  
  <Dim prop="IDENTIFIER">FRAAL211218B</Dim>  
  <Dim prop="IDENTIFIER_TYPE">INTERNAL_CODE</Dim>  
  <Dim prop="INTRA_GROUP_ACC_SCOPE">Y</Dim>  
  <Dim prop="ARREARS">0</Dim>  
  <Dim prop="ARREARS_DATE">2018-12-31</Dim>  
  <Dim prop="ASSET_SECURITISATION_TYPE">1101</Dim>  
  <Dim prop="COLLATERAL_AREA">FR</Dim>  
  <Dim prop="DFLT_STTS_ISSR">0</Dim>  
  <Dim prop="DT_DFLT_STTS_ISSR"></Dim>  
  <Dim prop="DT_FRBRNC_STTS"></Dim>  
  <Dim prop="DT_PRFRMNG_STTS"></Dim>  
  <Dim prop="ENTITY_STATUS">100</Dim>  
  <Dim prop="ENTITY_STATUS_DATE">2018-12-31</Dim>  
  <Dim prop="FRBRNC_STTS">0</Dim>  
  <Dim prop="GUARANTOR_ID">_X</Dim>  
  <Dim prop="GUARANTOR_ID_TYPE">_X</Dim>  
  <Dim prop="INSTR_CLASS">F_32</Dim>  
  <Dim prop="ISSUER_COUNTRY">FR</Dim>  
  <Dim prop="ISSUER_ID">969500FA2VUXZOJY0Q24</Dim>  
  <Dim prop="ISSUER_ID_TYPE">LEI</Dim>  
  <Dim prop="ISSUER_LEI">969500FA2VUXZOJY0Q24</Dim>  
  <Dim prop="ISSUER_NACE_SECTOR">K.65</Dim>  
  <Dim prop="ISSUER_NAME">CARS ALLIANCE AUTO LOANS FRANCE Master</Dim>  
  <Dim prop="ISSUER_SECTOR">S_125</Dim>  
  <Dim prop="ISSUE_DATE">2018-12-21</Dim>  
  <Dim prop="LGD_DWNTRNS"></Dim>  
  <Dim prop="LGD_NRML"></Dim>  
  <Dim prop="MAT_DATE">2019-01-21</Dim>  
  <Dim prop="MON_CURR">EUR</Dim>  
  <Dim prop="PD">1</Dim>  
  <Dim prop="PREFRMNG_STTS">0</Dim>  
  <Dim prop="PRIMARY_ASSET_CLASS">D.121</Dim>  
  <Dim prop="RSK_WGHT">0</Dim>  
  <Dim prop="SECURITY_STATUS">100</Dim>  
  <Dim prop="SECURITY_STATUS_DATE">2018-12-31</Dim>  
  <Dim prop="SENIORITY_TYPE">152</Dim>  
  <Dim prop="SCTID">DETENT_GPE</Dim>  
</Item>
```

France

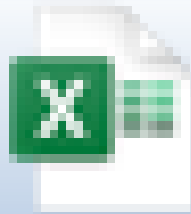
- Custom XML : Different languages

```
<xs:attribute name="dim" type="bbk:isoWaehrung" use="required"/>
<xs:attribute name="name" type="bbk:alphanum" use="required"/>
<xs:attribute name="waehrung" type="bbk:isoWaehrung" use="required"/>
<xs:attribute name="kurs" type="wpinvest:kurswertTyp" use="required"/>
<xs:attribute name="vrmgnswrk_klssfzrng" type="wpinvest:vrmgnswrkKlssfzrngTyp" use="required"/>
<xs:attribute name="vrrnggkt_art" type="wpinvest:vrrnggktArtTyp" use="required"/>
<xs:attribute name="vrbrfg_art" type="wpinvest:vrbrfgArtTyp" use="required"/>
<xs:attribute name="wpstatus" type="wpinvest:wpStatusTyp" use="required"/>
<xs:attribute name="dt_wpstatus" type="xs:date" use="required"/>
<xs:attribute name="rckstnd" type="xs:decimal" use="required"/>
<xs:attribute name="dt_rckstnd" type="xs:date" use="optional"/>
<xs:attribute name="blgnht_ort" type="wpinvest:blgnhtOrtTyp" use="required"/>
<xs:attribute name="em_name" type="wpinvest:issuerNameTyp" use="required"/>
<xs:attribute name="em_land" type="bbk:isoLand" use="required"/>
<xs:attribute name="em_gruppe" type="wpinvest:emSektorTyp" use="required"/>
<xs:attribute name="em_nace" type="wpinvest:issuerNaceSectorTyp" use="required"/>
<xs:attribute name="unternehmenstatus" type="wpinvest:unternehmenStatusTyp" use="required"/>
<xs:attribute name="dt_unternehmenstatus" type="xs:date" use="optional"/>
<xs:attribute name="em_gruppe_aufsicht" type="bbk:jaNein" use="required"/>
<xs:attribute name="em_gruppe_bilanz" type="bbk:jaNein" use="required"/>
<xs:attribute name="stndng_stts" type="wpinvest:stndngSttsTyp" use="required"/>
<xs:attribute name="dt_stndng_stts" type="xs:date" use="optional"/>
<xs:attribute name="lstng_stts" type="wpinvest:lstngSttsTyp" use="required"/>
<xs:attribute name="dt_lstng_stts" type="xs:date" use="optional"/>
<xs:attribute name="ausfall_stts_em" type="wpinvest:ausfallSttsTyp" use="required"/>
<xs:attribute name="dt_ausfall_stts_em" type="xs:date" use="optional"/>
<xs:attribute name="ausfall_stts_instrmnt" type="wpinvest:ausfallSttsTyp" use="optional"/>
<xs:attribute name="dt_ausfall_stts_instrmnt" type="xs:date" use="optional"/>
<xs:attribute name="pd" type="wpinvest:pdTyp" use="optional"/>
<xs:attribute name="lgd_abschw" type="xs:decimal" use="optional"/>
<xs:attribute name="lgd_nrml" type="xs:decimal" use="optional"/>
<xs:attribute name="rsk_gwcht" type="wpinvest:rskGwchtTyp" use="optional"/>
```

Germany

# Findings

- Data gathered from Central Bank websites



Feuille de calcul  
Microsoft Excel



# Going further

- *PoC for Anacredit and SHS – DPM & XBRL*



Feuille de calcul  
Microsoft Excel

DPM Anacredit



Feuille de calcul  
Microsoft Excel

DPM SHS

# Questions?

