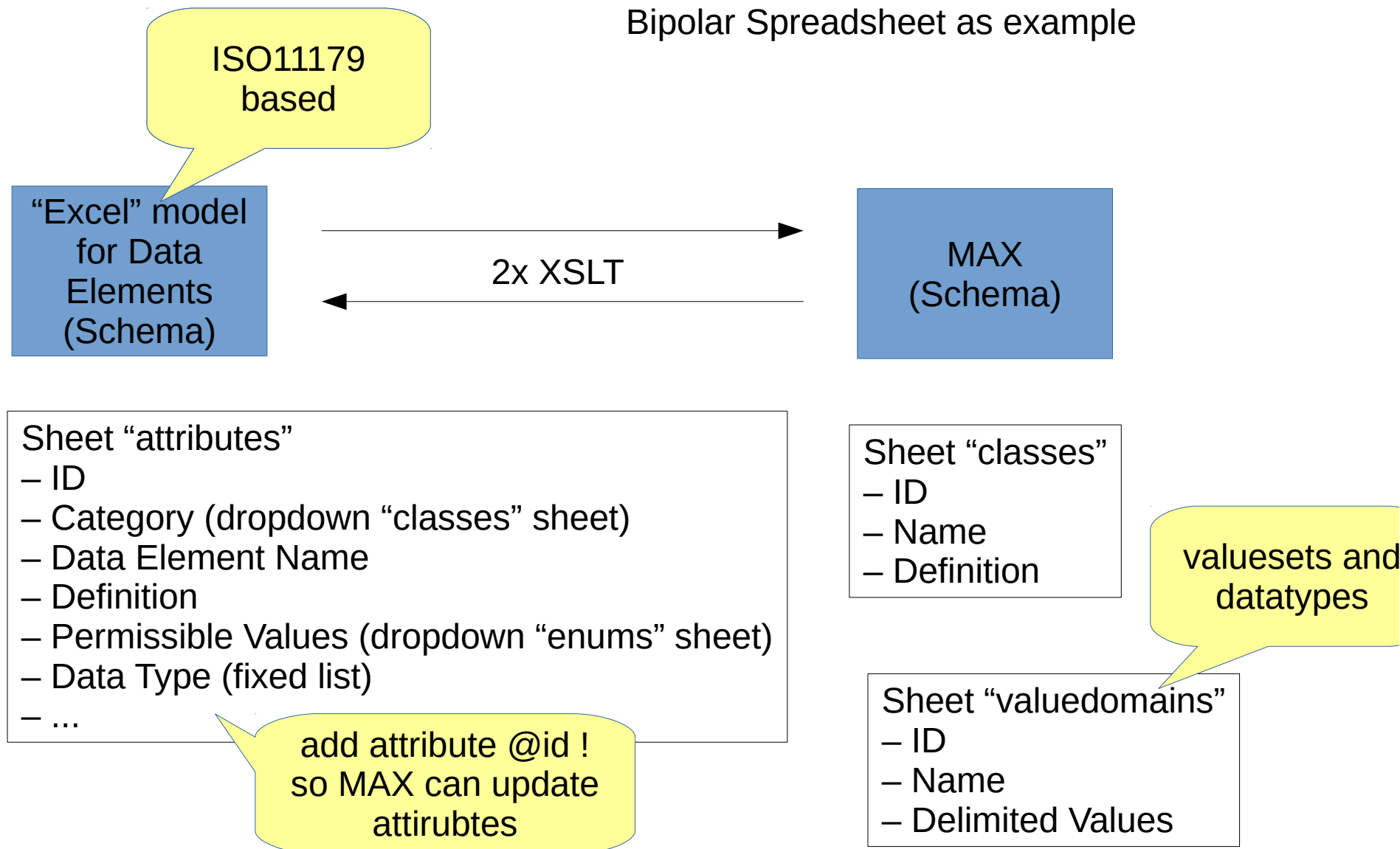


Use MAX
Data Elements (ISO11179)
Excel spreadsheet ↔ EA roundtrip

From Atlanta 2015 WGM

Spreadsheet

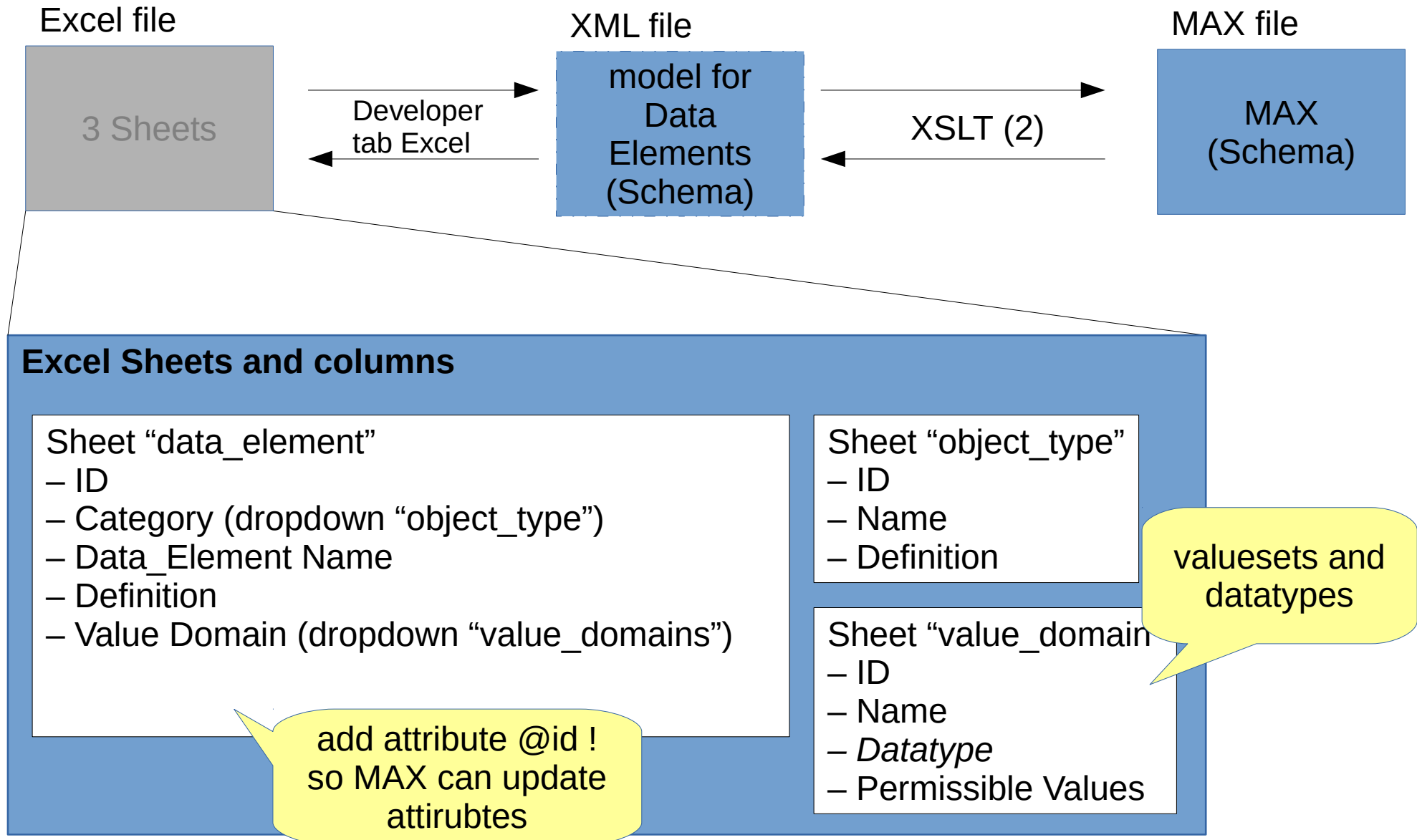
Bipolar Spreadsheet as example



ISO 11179

- Object_Class (class) has Data_Elements (attributes)
- Data Element is concrete version of generic Property
 - if *Object_Class* = “Person” and *Property* = “Age” a *Data_Element* is the Age of a Person
 - is part of Object_Class
 - has Value_Domain for values
- Value_Domain has datatype
 - specific Enumerated_Value_Domain with Permissible_Values
 - or Described_Value_Domain

ISO 11179-3 Registry Metamodel based



Make spreadsheet XML/MAX compatible

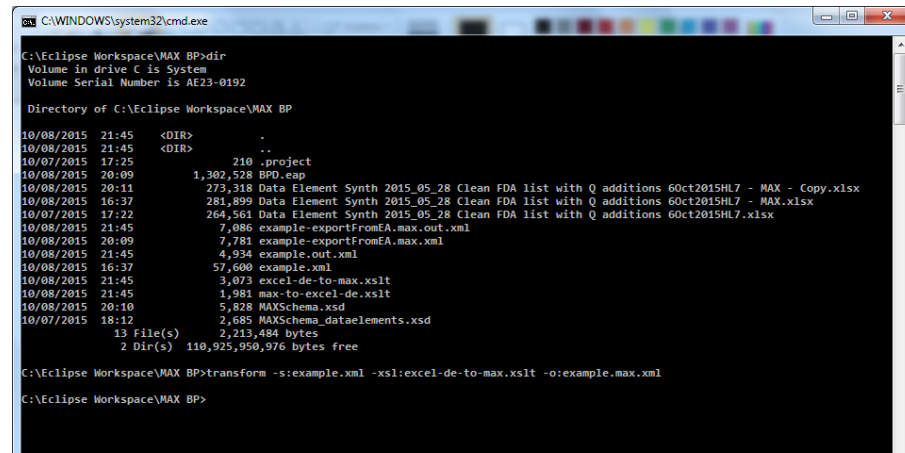
- Create spreadsheet and XML map left to right all columns to MAXSchema(_dataelement).xsd
- Insert extra columns that are in the source spreadsheet
 - *Then export works with not mapped columns, if you insert extra columns before mapping the export wo'nt work.*
- Remove merged cells / rows
- Paste in all cells values only ctrl-alt-v
- Change header labels
- Re-apply any formatting (don't do merge cells etc)

N.B. Use ValueSetName as DataType!
No need for the ValueSetName column.
Spaces are allowed!

-
- Import in EA, create diagram and add relationships, they stay in when update is done!

Issue: Update in EA gives Exception.
Update of attributes seems to be the problem. **WORKAROUND implemented**

MAX (cont)



```
C:\WINDOWS\system32\cmd.exe
C:\Eclipse Workspace\WAX BP>dir
Volume in drive C is System
Volume Serial Number is AE23-0192

Directory of C:\Eclipse Workspace\WAX BP

10/08/2015  21:45    <DIR>          .
10/08/2015  21:45    <DIR>          ..
10/07/2015  17:25             210          .project
10/08/2015  20:09      1,302,528    BPD.eap
10/08/2015  20:11      273,318 Data Element Synth 2015_05_28 Clean FDA list with Q additions 6Oct2015HL7 - MAX - Copy.xlsx
10/08/2015  16:37      281,899 Data Element Synth 2015_05_28 Clean FDA list with Q additions 6Oct2015HL7 - MAX.xlsx
10/07/2015  17:22      264,561 Data Element Synth 2015_05_28 Clean FDA list with Q additions 6Oct2015HL7.xlsx
10/08/2015  21:45           7,086 example-exportFromEA.max.out.xml
10/08/2015  20:09           7,781 example-exportFromEA.max.xml
10/08/2015  21:45           4,934 example.out.xml
10/08/2015  16:37          57,600 example.xml
10/08/2015  21:45           3,073 excel-de-to-max.xslt
10/08/2015  21:45           1,981 max-to-excel-de.xslt
10/08/2015  20:10           5,828 MAXSchema.xsd
10/07/2015  18:12           2,685 MAXSchema_dataelements.xsd
                13 File(s)          2,212,484 bytes
                2 Dir(s)      110,925,950,976 bytes free

C:\Eclipse Workspace\WAX BP>transform -s:example.xml -xsl:excel-de-to-max.xslt -o:example.max.xml
C:\Eclipse Workspace\WAX BP>
```

- Open a cmd-line
 - MAX requires SAXON9.NET so you have command line tools available to work with XML / XSLT!
- From excel to max
 - Transform -s:bpd.xml -xsl:excel-de-to-max.xslt -o:bpd.max.xml
- From max back to excel
 - Transform -s:bpd.max.xml -xsl:max-to-excel-de.xlst -o bpd.xml