

How To: XBRL Tagging in Word and Excel

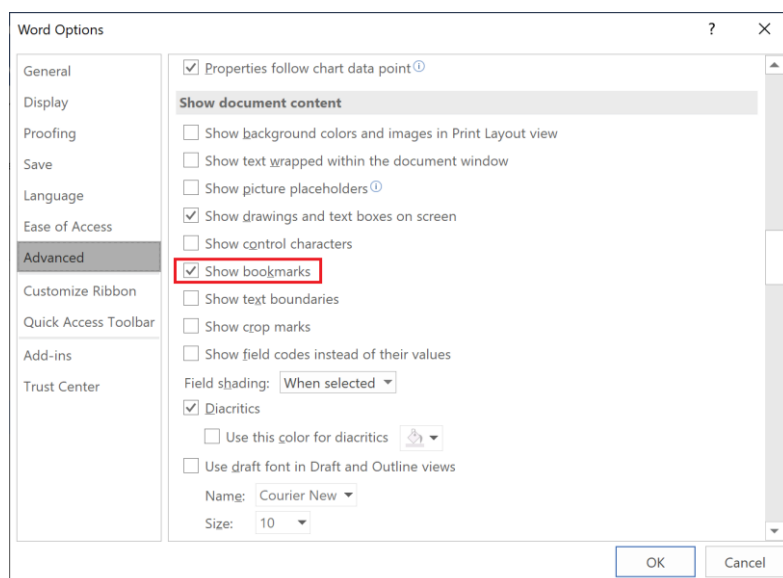
SAP Disclosure Management How To Series

Applies To: SAP Disclosure Management 10.1 SP0 and higher

RECOMMENDED SETTINGS

Always configure Word to display paragraph marks and other hidden formatting symbols. In the **Home** tab of the Word ribbon, activate the  icon.

Also configure Word to display Bookmarks. Go to **File > Options > Advanced**. In the “**Show document content**” section, tick the **Show bookmarks** check box.



Then, all XBRL tags in Word will appear inside dark grey brackets [...].

Note: You can work with multiple MS Word and Excel sessions, but only one MS Word and one MS Excel at a time with the DM XBRL Mapper started.

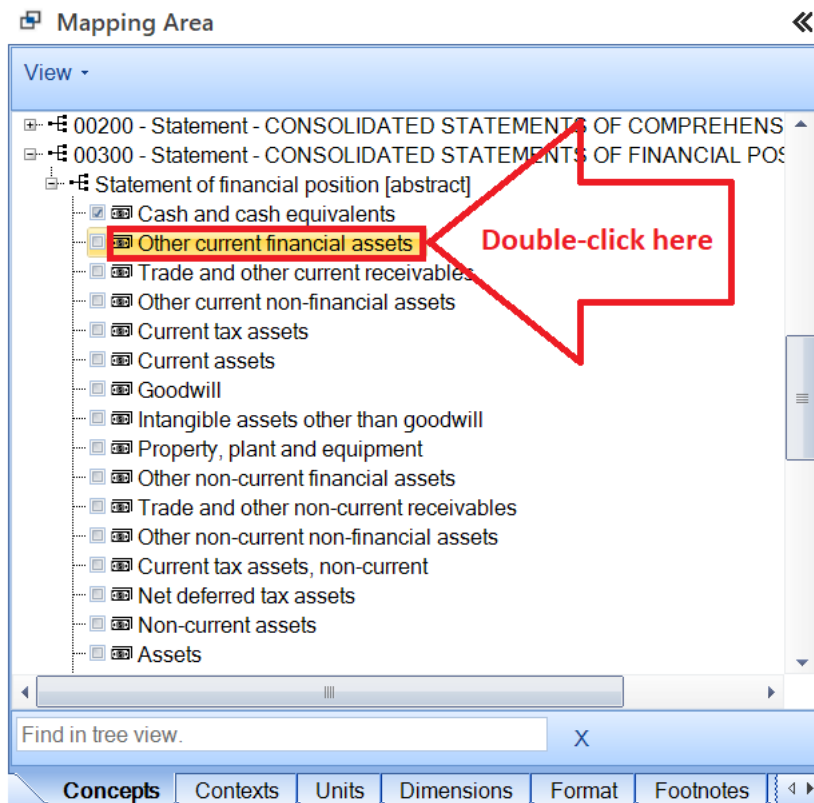
BEST PRACTICES

1. DIFFERENT WAYS OF TAGGING

In MS Excel, select a cell or a group of cells to tag.

In MS Word, select the whole text area for the tagging of the concept. Then click inside the area for the tagging of the context, the unit, the dimension member or the format.

In the Mapping Area located in the left side of Excel or Word, the standard way to assign XBRL Concept, XBRL Context, XBRL Unit and XBRL Dimension Member to text-block is to **double-click** the label of the entry in the tree-view of the mapping area.



Do not tick the check box of the related element, except if:

- it is not yet tagged
- you want to remove existing tagging on that element

2. [EXCEL] MOVE TAGGED CELLS

The DM Mapper should not be launched while:

- Moving cells before tagged cells
- Inserting rows, columns or cells before tagged cells

Otherwise, you might introduce discrepancies between the in-memory mapping and the tagging stored in the Excel chapter.

Conditional formatting (green and yellow highlighting) should be deleted after inserting row or column or cell just before tagged cell.

3. [EXCEL] HIDDEN CELLS AND IGNORED ROWS

If table cells are tagged in Excel but not retrieved in the Word document, then the SAP Disclosure Management iXBRL Mapping Creation will write all missing tags in Word in the standard <ix:hidden> section of the iXBRL instance report.

Common mistakes of the end-users are:

- to tag cells contained in hidden row or columns while tagging surrounding area, then retrieve the table in Word using “Excel Templates”
- to tag cells that are ignored in the formatting of the table in Word using “Word templates”

So, you should check that all cells tagged in the Data Cache are properly disclosed in the Word report, which is the source of the Inline XBRL Instance document.

4. [WORD] SEPARATORS BETWEEN TAGS

During tagging, you should leave at least **one separator character** in the Word document (space or paragraph character) between two contiguous or nested tagged text blocks. Otherwise, Word might mix the content of the tags. After tagging, it is possible to remove additional character.

Special case: you can assign **multiple tags** to the same text block, provided that you follow the following procedure:

- Show Bookmarks in Word (see section RECOMMENDED SETTINGS)
- Tag a first time the text-block completely (concept + context + possibly unit, dimension and format)
- Add a space separator (or any special character) at the beginning and at the end of the text block inside the brackets of the bookmark
- Tag inside the separators a second time the text-block completely (concept + context + possibly unit, dimension and format) so you are sure that the second tag is nested in the first.



For the fiscal year ended *December 31, 2022*

- You can tag as many times as you need the text block that way...
- Finally, remove all spaces (or special characters) added for the tagging of the nested tags.

5. [WORD] LAST PARAGRAPH CHARACTER IN INLINE XBRL

TEXT BLOCK TAGGING

When tagging Word text blocks for inline XBRL (iXBRL) publishing, always include the paragraph character at the end of the last paragraph, otherwise this paragraph will be missing in the iXBRL tag during generation of the XHTML instance document.

Example:

[19] Business Combinations ¶
 On September 24, 2021, SAP announced that it had entered into an agreement to acquire U.S.-based Gigya, Inc., a market leader for customer identity and access management solutions. The transaction closed on November 1, 2021, following receipt of regulatory approvals. ¶
 The majority of the purchase price for our acquisitions was allocated to goodwill and intangible assets. For more information, see [Notes 10](#). ¶
 There were no significant acquisitions in 2020. ¶ **NOT CORRECT**

Example:

¶ **[19] Business Combinations** ¶
 ¶ On September 24, 2021, SAP announced that it had entered into an agreement to acquire U.S.-based Gigya, Inc., a market leader for customer identity and access management solutions. The transaction closed on November 1, 2021, following receipt of regulatory approvals. ¶
 ¶ The majority of the purchase price for our acquisitions was allocated to goodwill and intangible assets. For more information, see [Notes 17 and 18](#). ¶
 ¶ There were no significant acquisitions in 2020. ¶ **CORRECT**

Example:

¶ **[19] Business Combinations** ¶
 ¶ On September 24, 2021, SAP announced that it had entered into an agreement to acquire U.S.-based Gigya, Inc., a market leader for customer identity and access management solutions. The transaction closed on November 1, 2021, following receipt of regulatory approvals. ¶
 ¶ The majority of the purchase price for our acquisitions was allocated to goodwill and intangible assets. For more information, see [Notes 17 and 18](#). ¶
 ¶ There were no significant acquisitions in 2020. ¶ **CORRECT**

TABLE TEXT BLOCK TAGGING

For US SEC reporting, it is recommended to tag every table this way:

- Select the **introduction paragraph** - if any before the whole table - when tagging table text block (Level III). This can be a section title or a sentence.
- To avoid issues with the management of Inline XBRL continuation tags <ix:continuation>, select the whole table and preferably **the paragraph underneath** when tagging table text block (Level III) or the end of disclosure text block (Level I) or the end of policy text block (Level II).

Example:

¶ The following table presents the distribution of the operating segments sales by geographical location of the customer. ¶

	Europe	Americas	Asia
Services	10	40	5
Industrial Solutions	87	32	78
TOTAL	97	72	83

¶ **CORRECT**

The above highlighted area in green color shows the table text block tag including the introduction paragraph and the paragraph symbol underneath the table.

If there are table footnotes, they should be part of the Table Text Block tag including the last paragraph character.

6. [WORD] REFRESH DATA LINKS

For performance reasons, it is recommended to refresh or add data-linked table in Word document using the SAP DM client BEFORE you launch the Word DM Mapper. All values tagged from Excel will then automatically appear tagged in Word.

7. [WORD] BOTTOM-UP TAGGING

As much as possible, start tagging text blocks from the nested smallest blocks to the container blocks until you reach the largest block.



For instance, when preparing US SEC reporting, tag each disclosure one by one in Word chapter:

- 1) Refresh the data-linked tables tagged in Excel using the SAP DM client
- 2) Launch the Word DM Mapper for the tagging of text blocks:
 - a. Start with the tagging of Level IV narratives if any
 - b. Then tag the Level III table text blocks if any
 - c. Then tag the Level II accounting policies text blocks if any
 - d. Finally, tag the Level I disclosure text block.

If you tag from top to down i.e., first the largest then the nested text blocks (Level I to Level III text block tagging in the case of the US SEC), you might change the tagging of the current tag but also all the parent tags at one time. As this multi-level mode cannot be changed in the current version, you might not be able to complete text-block tagging properly.

8. [WORD] TOP-DOWN UNTAGGING / UPDATING TAGS

Warning: selecting nested tag in Word makes you multi-select the tag together with all parent tags in read-mode and select only the tag in write-mode.

If you want to remove one nested tag, do not use the “**Remove Mapping**” button or contextual menu that might delete the current tag together with all parent tags. Rather put the cursor inside the tag, excluding children tags, then double-click the corresponding element in the taxonomy tree-view. The SAP DM Mapper will ask to remove mapping. Click **OK**.

Updating one nested tag means changing the Context, the Unit, the Dimension Member or the Format. Click inside the tag, then double click the label of the check box, or set the new format in selection box.

9. [WORD] CHECK COLOR CODING

When tagging a chapter, please check that the color coding stays consistent. It should look as follows:

Color	Nesting Level	Tagging Order	US SEC Level*
Green	0	Last	I
Blue	1	1 st or 2 nd or 3 rd	II or III or IV
Purple	2	1 st or 2 nd	III or IV
Grey	3	1 st	IV

(*) US SEC Levels I, II and III correspond to text block tagging, Level IV corresponds to detailed tagging.

For US SEC reporting, the first tagged values correspond to tags automatically transferred from Excel to Word (through tables, formula fields or floating fields) and narratives tagged in Word.

Example:

(1b) Relevant Accounting Policies

Business Combinations and Goodwill ← Tagged 4th in Word

We decide on a transaction-by-transaction basis whether to measure the non-controlling interest in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition-related costs are accounted as expense in the periods in which the costs are incurred and the services are received, with the expense being classified as general and administration expense. Tagged 1st in Word

Foreign Currencies

Income and expenses and operating cash flows of our foreign subsidiaries that use a functional currency other than the euro are translated at average rates of foreign exchange (FX) computed on a monthly basis. Exchange differences resulting from foreign currency transactions are recognized in other non-operating income/expense, net. ← Tagged 3rd in Word

Exchange Rates

The exchange rates of key currency affecting the Company were as follows:

Equivalent to €	Middle Rate		Annual Average Exchange Rate	
	as at December 31		2021	2020
U.S. dollar	USD	1.1993	1.0541	1.1315
			1.1045	1.1071

← Tagged 2nd in Word

← Tagged 1st in Excel

With effect from January 1, 2021, we have applied hyperinflationary accounting in accordance with IAS 29 for our subsidiary in Venezuela, the impact of which has not been material to us.

Revenue Recognition

Classes of Revenue

Please note that the colors depend on the nesting level, not on the US SEC level...

Warning: with the Word DM Mapper, the colors are not refreshed on the fly. You should regularly click the “Disable / Enable Highlighting” or the “Resolve incidents” button to review color coding.

If the color-coding does not stay consistent (for instance, same level tables have different colors...) in Word after refreshing highlighting, you should discard all recent changes and come back to the latest correct revision.

10. [WORD] SPLIT DISCLOSURES INTO SEVERAL CHAPTERS

You MUST organize Word chapters not to include too many XBRL tags. Typically, define one chapter per Core Financial Statement and Disclosure. Otherwise, you might experience very long response time in Word when editing chapter with the Word DM Mapper launched.

11. [WORD] REFRESH TABLES BEFORE OPENING DM MAPPER

It is recommended first refreshing content of Word chapters BEFORE launching the DM Mapper or opening taxonomy in Word.

12. RESOLVE INCIDENTS

It is recommended clicking regularly the “Resolve Incidents” button, especially after refresh of Word tables (through Excel Templates, No templates, Word templates) or Formula Fields or Floating Fields from the Data Cache.

13. [EXCEL] TAGGING OF DIMENSION MEMBERS

The order of tagging members in the **Dimensions** tab of the DM Mapper is very important in the case of 2 dimensions or more tables. The couple of dimension axis and member is recorded in the tag in the reverse order of the tagging. For instance:

	B	C	D	E	F	J
67	Sonstiges Ergebnis				22	-2.838
68	Gesamtergebnis				4.029	-2.838
69	Anteilbasierte Vergütungen			-43		
70	Dividenden				-1.499	
72	Erwerb eigener Anteile					
73	Ausgabe eigener Anteile aus			13		
74	Hyperinflation				-17	
75	Zugänge aus Unternehmens-				-33	
76	zusammenschlüssen				2	
76	Übrige Veränderungen					
77	31.12.2019		1.229	570	24.769	508
78	Übernahme von IFRS 15				83	
79	Übernahme von IFRS 9				135	-160
80	1.1.2020		1.229	570	24.987	347
81	Gewinn nach Steuern				4.083	
82	Sonstiges Ergebnis				11	887
	Gesamtergebnis				4.093	887

If you tag the **Retained earnings member** of the **Component of equity dimension** before the **Increase (decrease) due to application of IFRS 15 member** of the **Retrospective application and restatement dimension**, then the dimensional tagging will be recorded this way:

`ifrs-full:RetrospectiveApplicationAndRetrospectiveRestatementAxis|ifrs-full:IncreaseDecreaseDueToApplicationOfIFRS15Member||ifrs-full:ComponentsOfEquityAxis|ifrs-full:RetainedEarningsMember`

where the latest tagged dimension appears first in the list separated by double-pipe symbol(s).

Always apply the same order of tagging between axis, otherwise you might face validation errors due to duplicate XBRL contexts where same dimension axis and members are disclosed in different order.

14. [WORD] DIMENSIONAL AND FORMAT TAGGING

Warning: in the current version 10.1 Stack 1902 of SAP Disclosure Management, the tagging of the dimension member or the format of nested tag might also update the tagging of parent facts.

The workaround for the tagging of dimension members is to temporarily remove the tagging of all parent facts, then retag bottom-up.

15. [EXCEL] MULTIPLE CONTEXTS TAGGING

When selecting multiple cells tagged with both *Instant* and *Duration* concepts, all XBRL Context are open for tagging. They are not disabled for tagging to allow more rapid tagging. So, it is your

responsibility not to tag context which definition of the period does not match the *periodType* attribute of selected concepts. Otherwise, you might get validation errors due to incorrect context used in XBRL facts.

16. [WORD] SPECIAL CASES

Since SAP Disclosure Management 10.1 Stack 1901, you can tag separate text blocks with the same concept, context and dimension. This allows the mapping of non-contiguous areas inside one single tag – or excluding areas from tags.

This is useful to exclude text area not properly managed by the Word DM Mapper, or to support larger text blocks possibly distributed among multiple chapters.

17. IN CASE OF EXCEPTION

In case of error / exception of the DM Mapper during tagging, you should discard changes and come back to the latest consistent revision.

18. SAVE REGULARLY

While tagging, save the chapter regularly. Click “**Apply Changes**”, then tick the “**Edit**” radio button if you have not finished the mapping process.

UNSUPPORTED FEATURES

Multi selection tagging is currently not supported in Word i.e., you cannot select multiple text blocks already tagged with concepts and apply the same XBRL Context and/or XBRL Unit and/or Dimension Member and/or Format.

Multi-level mode is currently not supported in Word i.e., you cannot select nested text block tag and decide whether you assign XBRL Context and/or XBRL Unit and/or Dimension Member and/or Format to the nested tag only or the nested tag including the parent tags.

Especially, you cannot tag Dimension Member and/or Format to text-block nested inside parent text-block already tagged with Dimension Member and/or Format. You might need to retag parent text-block and use the Mapping Overview to check tagging in Word.

REVIEW TAGGING

19. 2-WAYS SYNCHRONIZATION

DOCUMENT TO MAPPING AREA

With the Excel or the Word DM Mapper, you can click one tags or select several tags inside the document to easily locate the corresponding node(s) of the Tree View or the value inside the Mapping Area: XBRL Concept, Context, Unit or Dimension Member or Format

Attention: in the Mapping Overview tab, the rows corresponding to the selected tags are highlighted in red color, but the focus is not put on any row, so you might have to scroll the table



until you find it. You can sort the table by clicking the one header to find the row more quickly, each row corresponding to one tag

MAPPING AREA TO DOCUMENT

With the Excel DM Mapper launched, you can select any node in the tree view or row of the Mapping Overview table, then the corresponding cells will be highlighted in the current worksheet and the focus is put on the first tag.

With the Excel DM Mapper launched, you can select any node of the tree view or row of the Mapping Overview table, then only the first corresponding text block tag is highlighted and the focus is put on it inside the Word chapter.

20. SCROLLING

While the cursor is over the Mapping Area of the DM Mapper, the use of the scroll wheel of the mouse will also cause the document to scroll up or down.

21. INTERNAL TAGGING

The tags are stored on-the-fly inside the Excel and Word chapters. Then they are consolidated in the database when the user applies changes. If you have recent version of SAP DM, the upload of document allows proper storage of the XBRL tags in the database.

EXCEL

Go to **File > Options** then **Customize Ribbon**. In the right area, tick the **Developer** checkbox to activate the **Developer** tab in the Office Ribbon.

Go to the **Developer** tab then click the **Visual Basic** icon. In the **Project** window, select the **DM_Variables** sheet. In the **Properties** window, change the **Visible** property to **-1 - xlSheetVisible**.

You can now access the **DM_Variables** sheet to review the internal Excel tagging. Each tag corresponds to a row of the table. Especially, in the **Reference** column, check that there is no #REF! Excel error, which might be caused by deleted tagged cell.

Warning: Never modify the content of the table in the DM_Variables worksheet while the DM XBRL Mapper is launched or the XBRL taxonomy is loaded in Excel. This might cause an exception of the Excel Add-in.

The highlighting of tagged cells (green color when the tagging is complete, yellow otherwise) is managed through Conditional Formatting. Select a range of tagged cells in Excel, then go to **Home > Conditional Formatting > Manage Rules** to review or possibly remove improper rules.

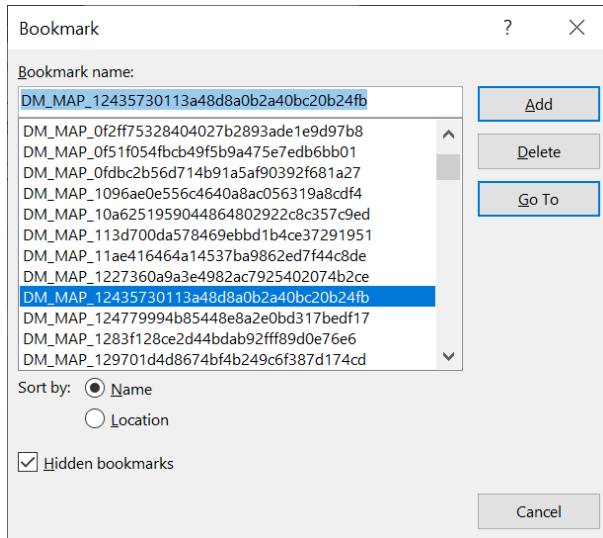
Alternately, you can try to fix highlighting problems by clicking the **Resolve Incident** button in the DM XBRL Mapper tab of the Ribbon.

In the case of Inline XBRL, all Excel tags not retrieved in Word chapters (because there is no datalink to Briefing Book or the tagged cells have been hidden) will appear in the **<ix:hidden>** section of the generated instance document.

WORD

There is one Word bookmark for every XBRL block tagged in Word. All those bookmarks are named DM_MAP_(GUID), the GUID (Global Unique Identifier) being a 128-bit unique reference number formatted in hexadecimal.

In Word, you can review the DM_MAP_... bookmarks by selecting the **Insert** tab in the Office Ribbon then click the **Bookmark** icon:



The description of all XBRL tags (concept, context, unit, dimension, format) is stored in Word variable called **DM_MAPPING000**

If “Data Ambiguous” errors related to DM_MAP... tags are logged in the generation log or in the **XBRL - Template - Consistency Validation.xlsx** file, simply copy the DM_MAP_(GUID) reference and paste it in the **Bookmark name** entry field of the **Bookmark manager** (see above screenshot), then click the **Go To** button to identify every duplicate tag.

If DM_MAP_(GUID) references logged in the validation report do not exist, run **Resolve Incident** to refresh the XBRL mapping, or search for legacy mapping inside Word template of the report. Remove all XBRL tags from Word template by using the Word macro defined in the next section.

If the Word DM XBRL Mapper get stuck when selecting or parsing existing tagged block at the opening of the chapter, kill the Word process, undo check-out and reopen the Word chapter without launching the DM XBRL Mapper. You can simply remove XBRL tag from Word chapter by deleting the corresponding bookmark, then **Apply Changes**.

RESET TAGGING

EXCEL

Go to **File > Options** then **Customize Ribbon**. In the right area, tick the **Developer** checkbox to activate the **Developer** tab in the Office Ribbon.

Go to the **Developer** tab then click the **Visual Basic** icon. In the **Project** window, select the **DM_Variables** sheet. In the **Properties** window, change the **Visible** property to **-1 - xlSheetVisible**.

Then, you can simply right-click the **DM_Variables** worksheet and delete it. Finally **Apply Changes** in your chapter.

Warning: Never remove the **DM_Variables** worksheet while the **DM XBRL Mapper** is launched or the **XBRL taxonomy** is loaded. This might cause an exception of the **Excel Add-in**.

WORD

Go to the **View** tab of Word and click **Macros > View Macros**. In the **Macro name** field, enter: **RemoveXBRLMapping** and click the **Create** button. Copy-paste the following code:

```
Sub RemoveXBRLMapping()
'To delete XBRL tagging in a Word file
Dim x As Long
Dim objBookmark As Bookmark
MsgBox ActiveDocument.Variables.Count
For x = ActiveDocument.Variables.Count To 1 Step -1
    If Left(ActiveDocument.Variables(x).Name, 6) = "DM_MAP" Then
        MsgBox ActiveDocument.Variables(x).Name
        MsgBox ActiveDocument.Variables(x).Value
        ActiveDocument.Variables(x).Delete
    End If
Next x
For Each objBookmark In ActiveDocument.Bookmarks
    If Left(objBookmark.Name, 6) = "DM_MAP" Then
        objBookmark.Delete
    End If
Next
End Sub
```

Close Microsoft Visual Basic for Application. Then, go to the **View** tab of Word and click **Macros > View Macros**. Select the **RemoveXBRLMapping** macro that have just been created, then click the **Run** button.

This macro will erase all XBRL tags from current Word chapter. Finally, **Apply Changes**.

FREQUENTLY ASKED QUESTIONS

Does the **DM XBRL Mapper** support the following tagging methods / requirements:

a) **Continuation**

[EXCEL] N/A (Non applicable)

[WORD] Yes. Separated text blocks can be tagged to compose one single fact, the text blocks are concatenated in the order of appearance in the Word report

b) **Multi-selection**

[EXCEL] Yes. It is possible to select any range of Excel cells and tag them with same concept, context, unit, dimension member or format. It is also possible to select non-contiguous cells by using the CTRL key and then, tag them.

[WORD] No. It is currently not possible to select multiple text blocks and tag them to apply same context, unit, dimension member or format.

c) **Nested**

[EXCEL] N/A (Non applicable). Note that you cannot select part of Excel cell and tag it. But you can split cells, considering the restriction that 2 cells with different values should not be tagged with the same fact. That would cause "Data Ambiguous" error.

[WORD] Yes. Special color coding allows distinguishing several tags nested to one another. This is a requirement for US SEC (Level I to IV tagging) and ESEF reporting.

c) **Multi-level (see definition below)**

[EXCEL] N/A (Non applicable).

[WORD] There is no switch in the Word DM XBRL Mapper to allow the tagging of context, unit, dimension member or format in the selected text block only or including all parent text blocks

d) **Overlapping**

[EXCEL] Yes. Thus, you can mix different tagging of concept, context, unit, dimension member or format in row, column or area.

[Word] No. The tagged areas should be either distinct or nested to one another.

e) **Multiple tags**

[EXCEL] No. You cannot assign multiple tags to the same cell.

[WORD] Yes. You can assign multiple tags to the same text block area, provided that all tags are nested to one another. See Word tagging best practices in section 4.

What is multi-level?

The multi-level mode applies to tagging in MS Word and means that:

- you can review the tagging of the selected text block and all parents when clicking a text block
- you can change the context, unit, dimension member or format of the current tag and all parents at one time

If the multi-level is deactivated, then:

- you can review the current tag only, independently from the parent tags
- you can change the tagging of the context, unit, dimension member or format of the child text block individually

Currently, the DM XBRL Mapper applies the multi-level mode without clearly being stated, which might be confusing.

Is there any issue or recommendation when tagging text blocks with multi-column layout?

No.