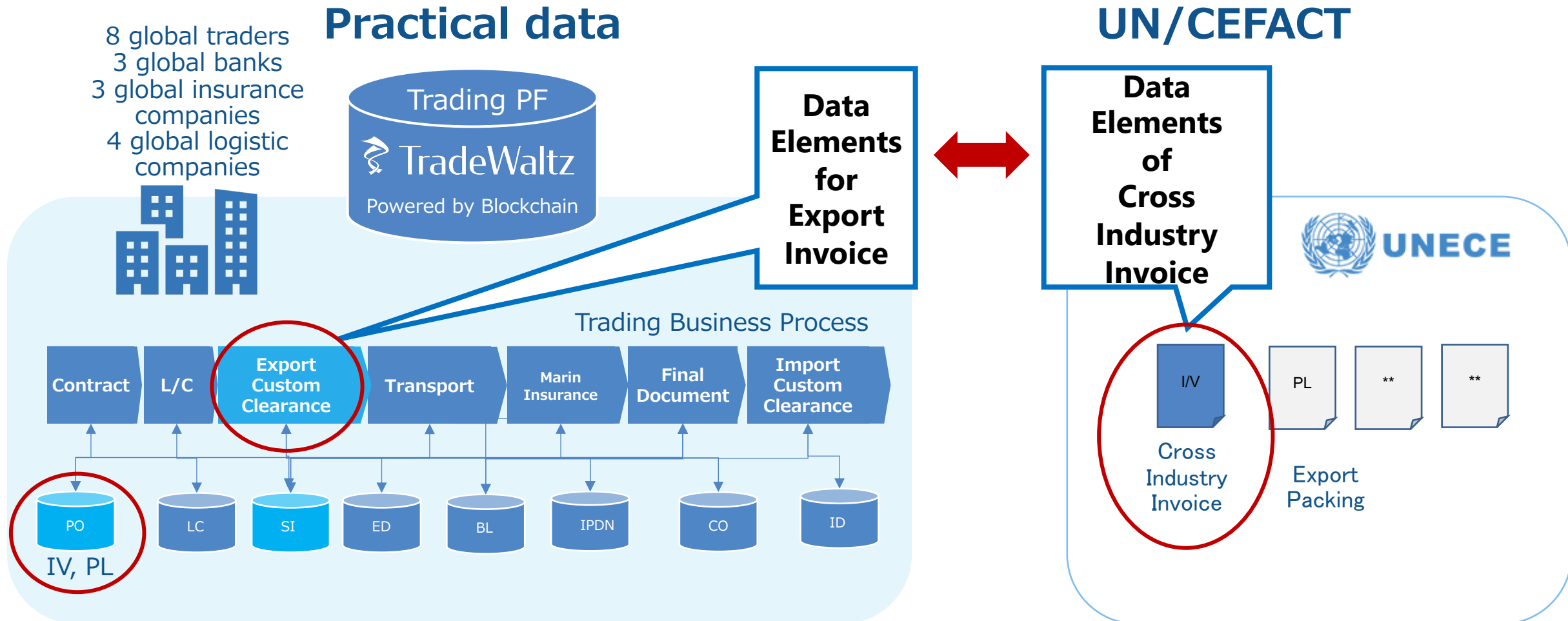


Problems encountered when matching data items handled by trade practitioners with UN/CFEACT



Mapping of practical data with UN/CEFACT (Japanese government project)

- Over the course of the year 2022, a Japanese government working group has been comparing invoice data items of trade practitioners and UN CEFACT.



Mapping of practical data with UN/CEFACT (Japanese government project)

- The results of the cross-checking confirmed that many of the international trade items required for trade practitioners were **matched with UN/CEFACT**.

Practical data
(Export Invoice, etc)

UN/CEFACT
(Cross Industry Invoice, etc)



<Mismatch>

IV : 65 items
PL : 20 items

Total : 85 items

<Match>

IV : 60 items
PL : 70 items

Total : 130 items

Matched

<Mismatch>

IV : 140 items
PL+a : 330 items

Total : 470

Finding 1) UN/CEFACT needs more items

- When looking at the document units, some required items for trade practitioners are not defined on UN/CEFACT, and these items need to be **additionally defined**.

Practical data
(Export Invoice, etc)

UN/CEFACT
(Cross Industry Invoice, etc)

TradeWaltz

<Mismatch>

IV : 65 items
PL : 20 items

Total : 85 items

Data needed

<Match>

IV : 60 items
PL : 70 items

Total : 130 items

<Mismatch>

IV : 140 items
PL+a : 330 items

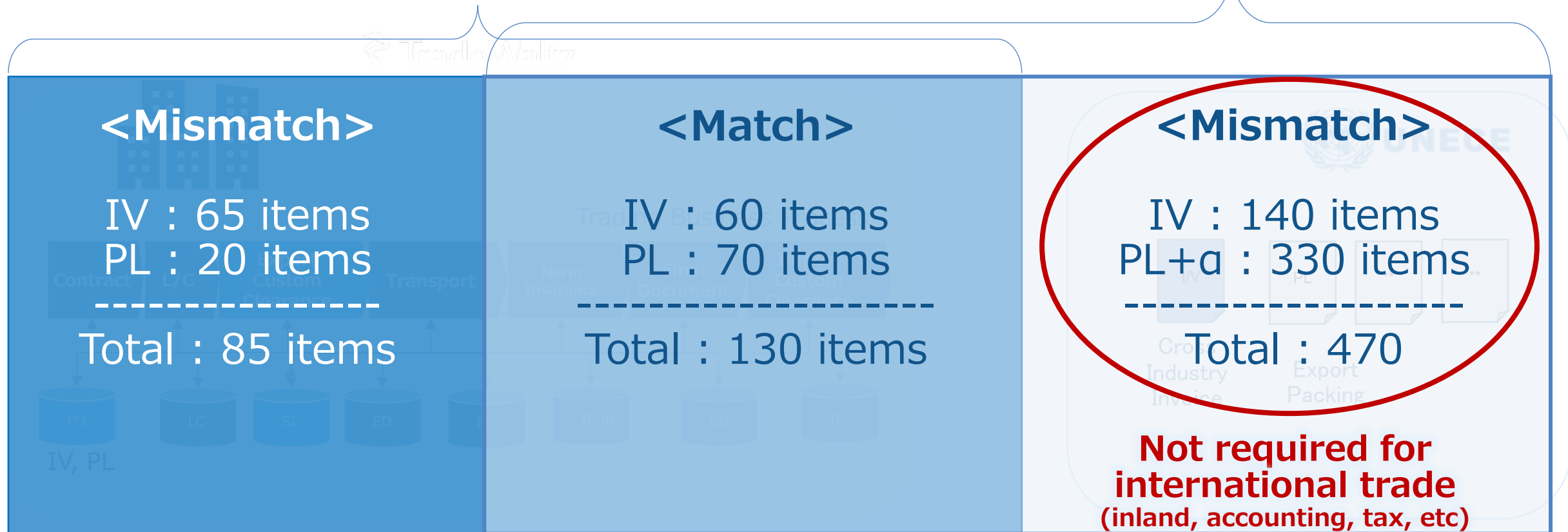
Total : 470

Finding2) UN/CEFACT includes not international trade related items

- Looking at the mismatch items on the UN/CEFACT side, most of them were items that are **not required for international trade**, such as inland, accounting, and tax.

Practical data
(Export Invoice, etc)

UN/CEFACT
(Cross Industry Invoice, etc)

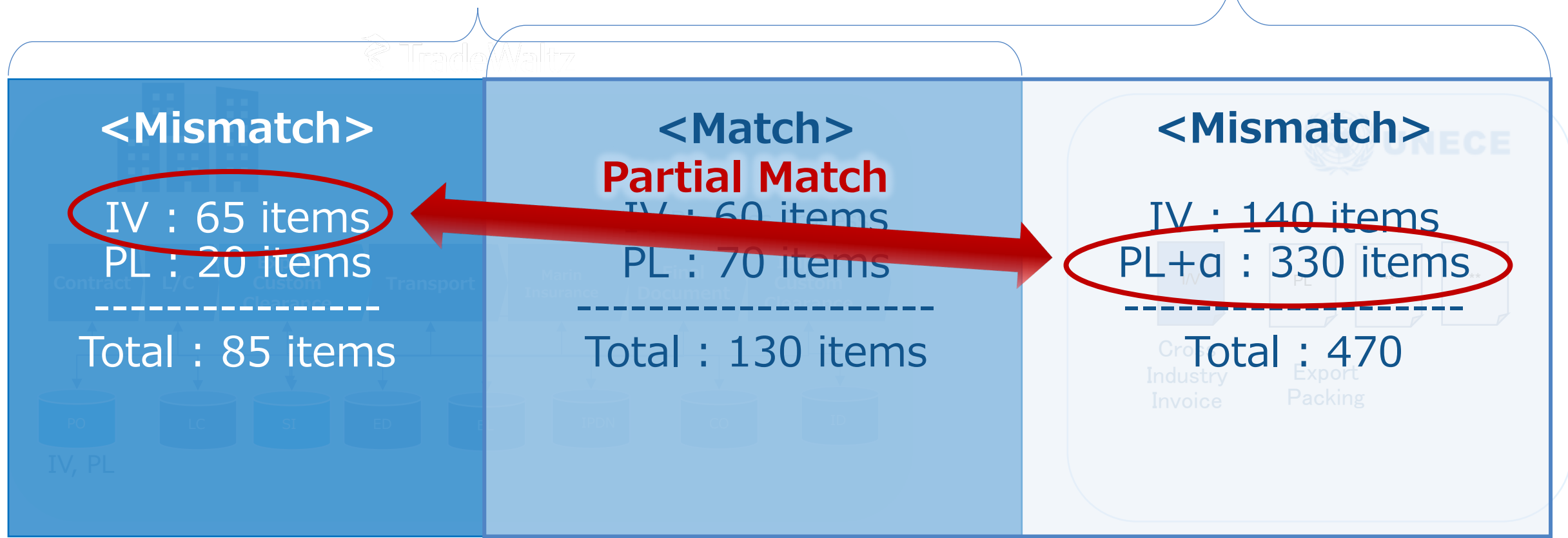


Finding3) Blind spots in document unit management

- In some cases, items defined in UN/CEFACT did not match document-base because they were **used in other documents** in trade practice.

Practical data
(Export Invoice, etc)

UN/CEFACT
(Cross Industry Invoice, etc)



Finding4) Blind spots in terms of data type, who, when, why

- In the process of data matching, we realized that **"data type"** and **"Who, When, Why of data"**, which are necessary for practical use, were not taken into account in UN/CEFACT.



Practical data specifies

IV : 65 items
PL : 20 items

"from Who to Who"

Total : 85 items

"When" the data is used
"Why" the reason of trade
(*Trade compliance)

UN/CEFACT does not

IV : 140 items
PL+a : 330 items

Total : 470

Order Industry Invoice Export Packing

3 Suggestion from our findings

- From these findings, we offer **three recommendations** for the future UN/CEFACT. These are consistent with the objectives of this project.

Practical data
(Export Invoice, etc)



UN/CEFACT
(Cross Industry Invoice, etc)

1 UN/CEFACT issue of the lack of items that are practically necessary for international trade

2 There is a negative effect of managing data items by document (data is correct but documents are not).

3 UN/CEFACT lacks consideration of "data types" and "who, when, why of data"



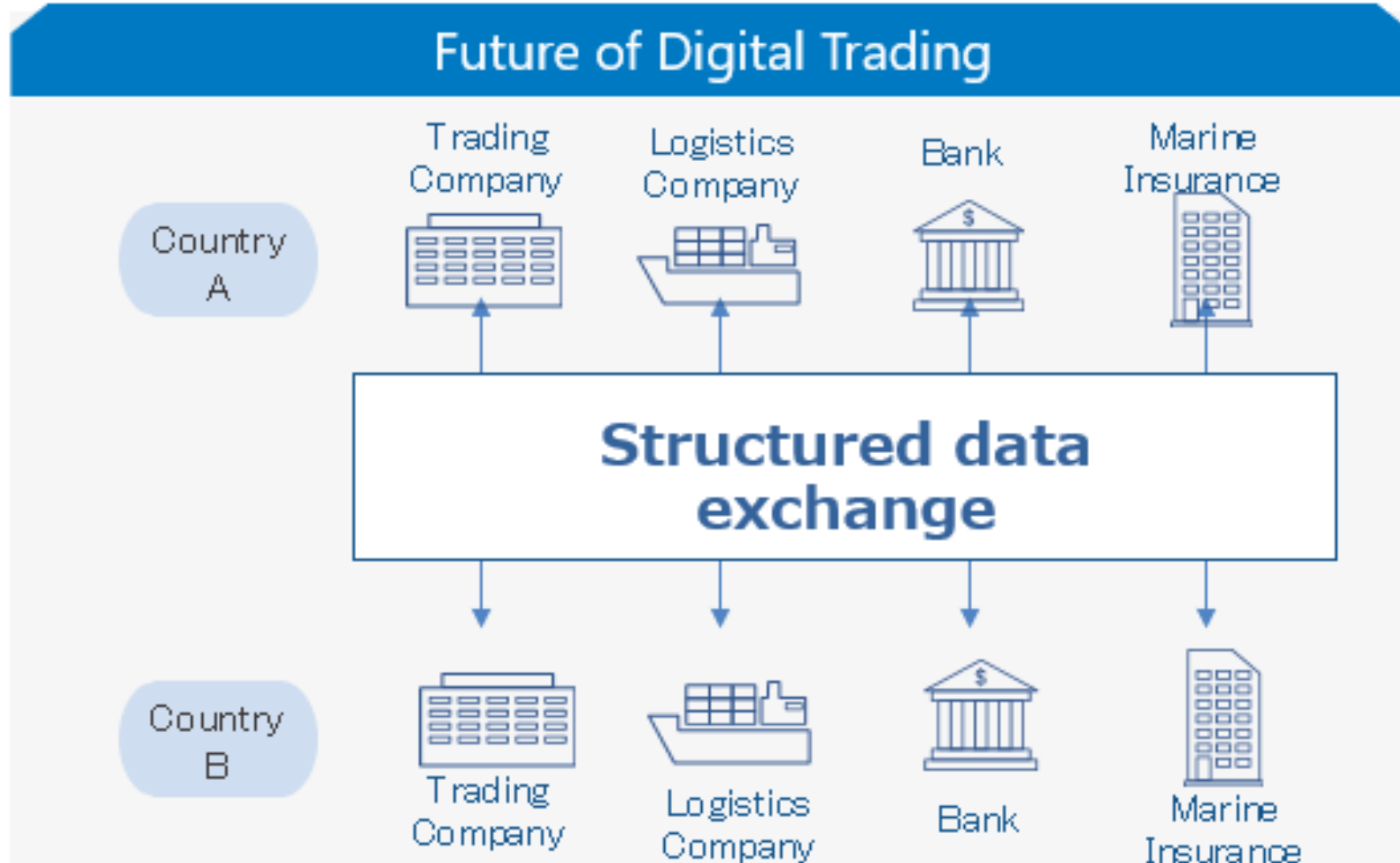
1 Add items to UN/CEFACT that are necessary for international trade practice; discussion needed on whether to keep inland items, etc.

2 Since there is sway in which data is used for which documents by practitioners, it should be defined in terms of structured data necessary for trade.

3 Let's define each elements of 'from Who to Who', 'When', and 'Why'. (fix Business Process and specify element definitions)
Let's define data elements of system rules

- number of digits/characters
- data types
- validation rules

3 Suggestion from our findings



Appendix

Result of Mapping of Invoice Data Elements

Type of Documents	Mandatory Data Elements for Trading IV/PL	TW DB of Mandatory Data Elements for Trading IV/PL	UNCEFACT DB of Mandatory Data Elements for Trading IV/PL	UNCEFACT DB Of Mandatory Data Elements for Trading IV/PL
Export I/V	125	123	60	200
Export P/L	TBA	TBA	120	400

POINT

- Cross Industry Invoice doesn't focus on 'International Trading'.
 - including many subsets of Inland, Accounting, TAX
- Each elements of Cross Industry Invoice do not specify 'from Who to Who', 'When', and 'Why'.

