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TRACKING

EU Secondary DD 1.4

Feb 06th 2020

Dentsu Overview

- **60 000** employees, in 145 countries
- **7 Bio EUR** revenue
- Marketing, Media and Technology group
- Large expertise in digital transformation, data analytics and product traceability
- Dentsu TRACKING
 - Located in Switzerland (Zurich, Geneva and Lausanne)
 - Approved Primary Repository Provider operating 14 Primary Repositories
 - Appointed as the Secondary Repository operator on 21st of December 2018
 - 60 dedicated experts

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Common Mistakes

Common Mistakes

Master Data

- Economic operators, facilities, machines missing in the registries
- Incomplete or missing addresses
- Non-Romanised characters

Event Data

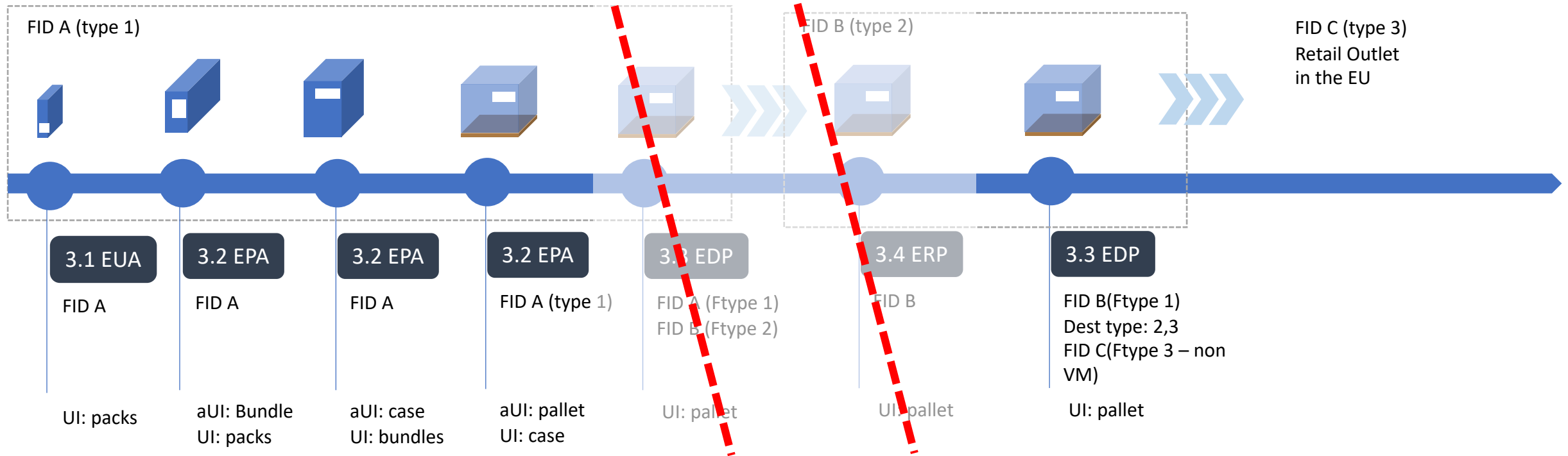
- Wrong UI codes capture
- Human readable UI mismatch
- Wrong TP_ID
- Event Time “yyMMddHH” format

Event Transmission

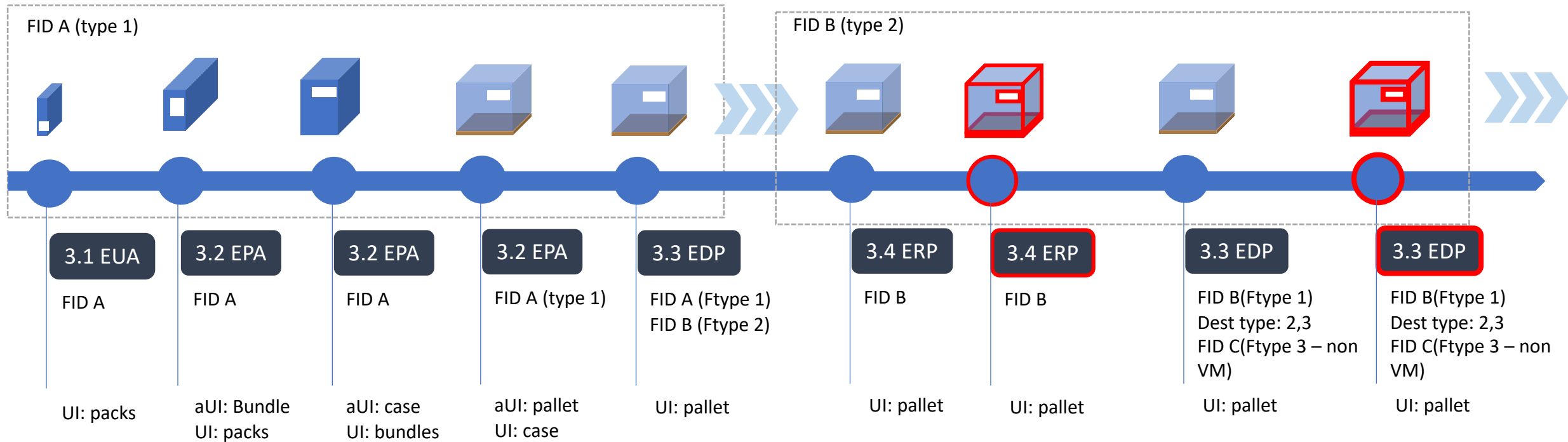
- Events not reported
- Multiple Aggregation Events on the same UI
- Incorrect Event Sequence transmission



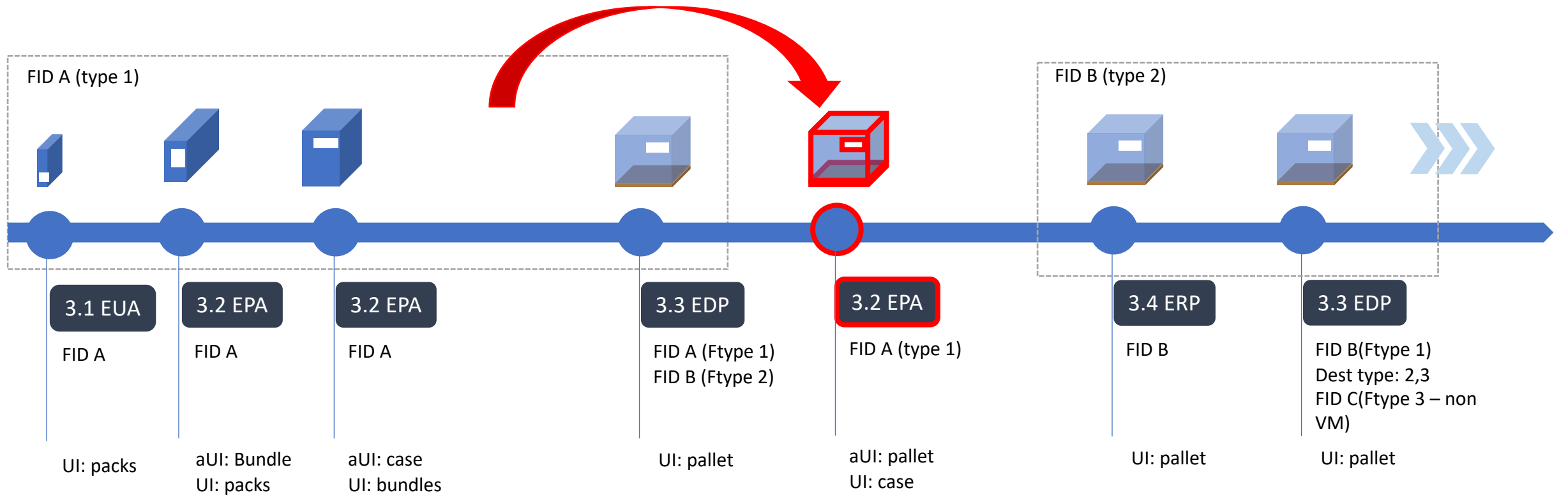
Data Accuracy: Events not reported



Data Accuracy: Events reported multiple times



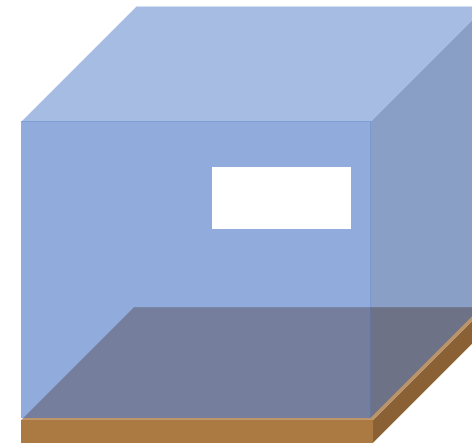
Data Accuracy: Wrong reporting sequence



Sequence Validations

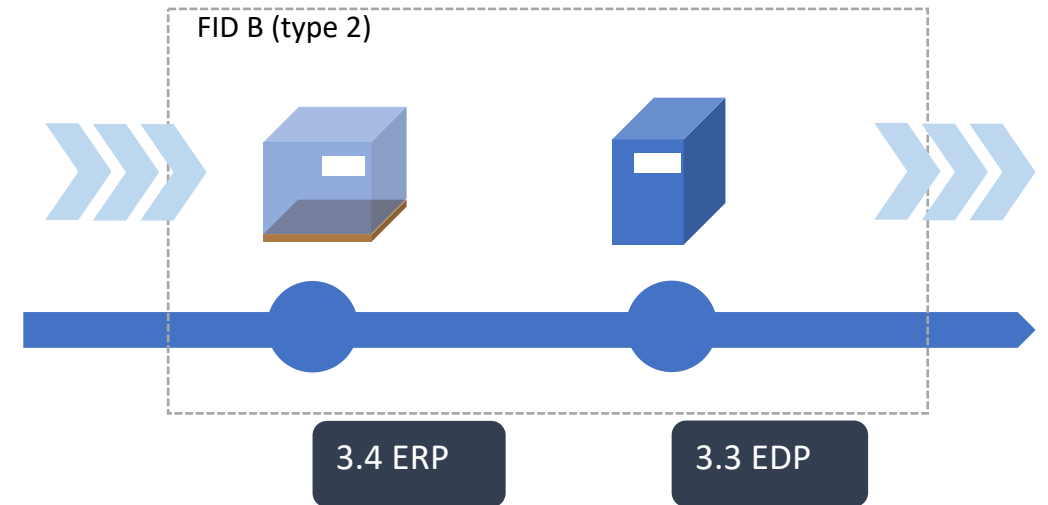
Principles 1 & 2

- **Principle 1:** All aggregation events are full aggregation. Once the aUI is aggregated, a subsequent aggregation event on the same parent aUI should be rejected.
- **Principle 2:** All disaggregation events are full disaggregation. Once the aUI is disaggregated, no movement should be reported on that aUI (until the next disaggregation and aggregation event are reported.).



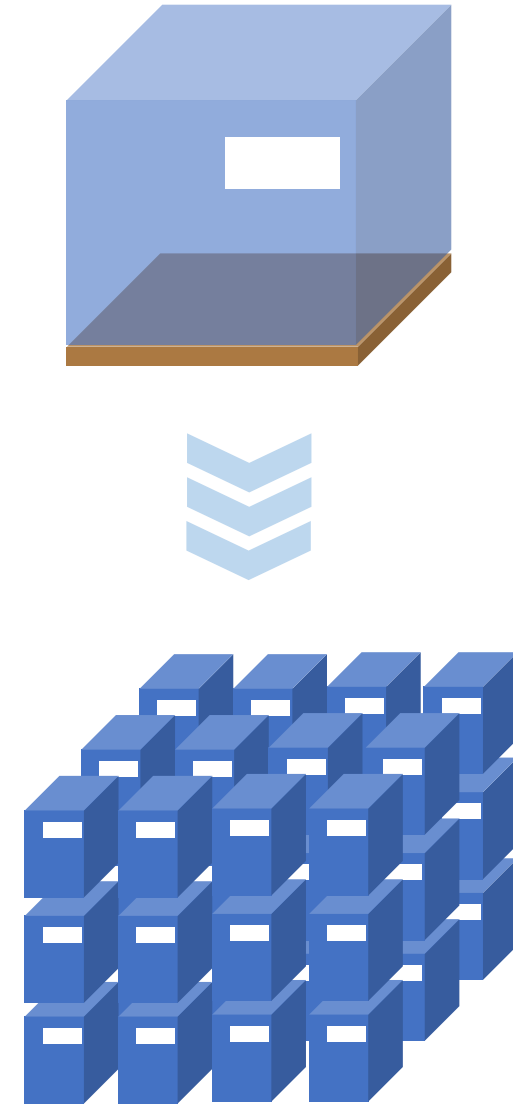
Principle 3

Principle 3: Implicit disaggregation. Disaggregation event reporting is mandatory only when the aUI is reused in a subsequent aggregation event (as a parent aUI). The implicit disaggregation is detected when at least one child UI is reported in an aggregation or product movement. The parent aUI of this child UI will be considered as disaggregated. In the case that the child UI is part of an aggregation hierarchy, all parent aUIs will be disaggregated.



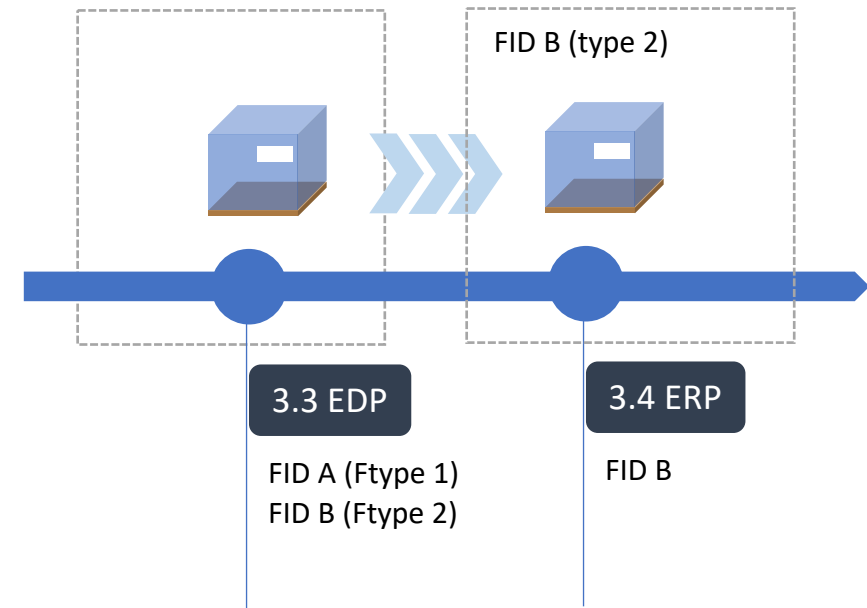
Principle 4

Principle 4: All disaggregation must be performed at a location. No Disaggregation are allowed during the transport.



Principle 5

Principle 5: The reporting on the Arrival should be done on the same UI that have been reported during the Dispatch/Transloading process. This is a consequence of principle 4. This means that an Arrival Event that contains child UI of UI reported during the Dispatch/Transloading Event will be rejected. The same UI must be reported.



Sequence Validations

DD 1.4 summary

Summary

- Sequence Validation (duplicate, state, sequence)
- API changes
 - Message Time (time long) for sequence validation
 - Updated Message Size limit – allowing the online validation under the 60 Sec SLA
 - Address Fields update (Transactional documents)
 - Error Code List update
- ID Issuer Technical Ownership



Transactional Events

- Not impacting the states and sequence validation.
- Can be transmitted and recalled at any time

- *EIV (4.1)* *Invoice*
- *EPO (4.2)* *Purchase order*
- *EPR (4.3)* *Payment record*

Last Message Recall

Only the recall of the **last event** for **each UI** is authorized.

Additional validation is required in order to check that for the recalled message, all the UI do not participate in any subsequent (2.x, 3.x) events.

Sequence Grace Period

During the sequence validation grace period, If the UI doesn't pass the sequence validation, it will still be **accepted**, and the message processed.

Because the sequence validation is not respected, the processing system (Primary repository or Router) will not be able to maintain an accurate state for that specific UI. The UI will be identified, and further events related to this UI will be accepted.

End of Sequence Grace Period

For upUIs and aUIs which enter the repositories system 1st of April onwards, the 1.4.2 sequence validations will apply with 400 ERRORS (no 299 WARNINGS).

Pre April 1st UIs

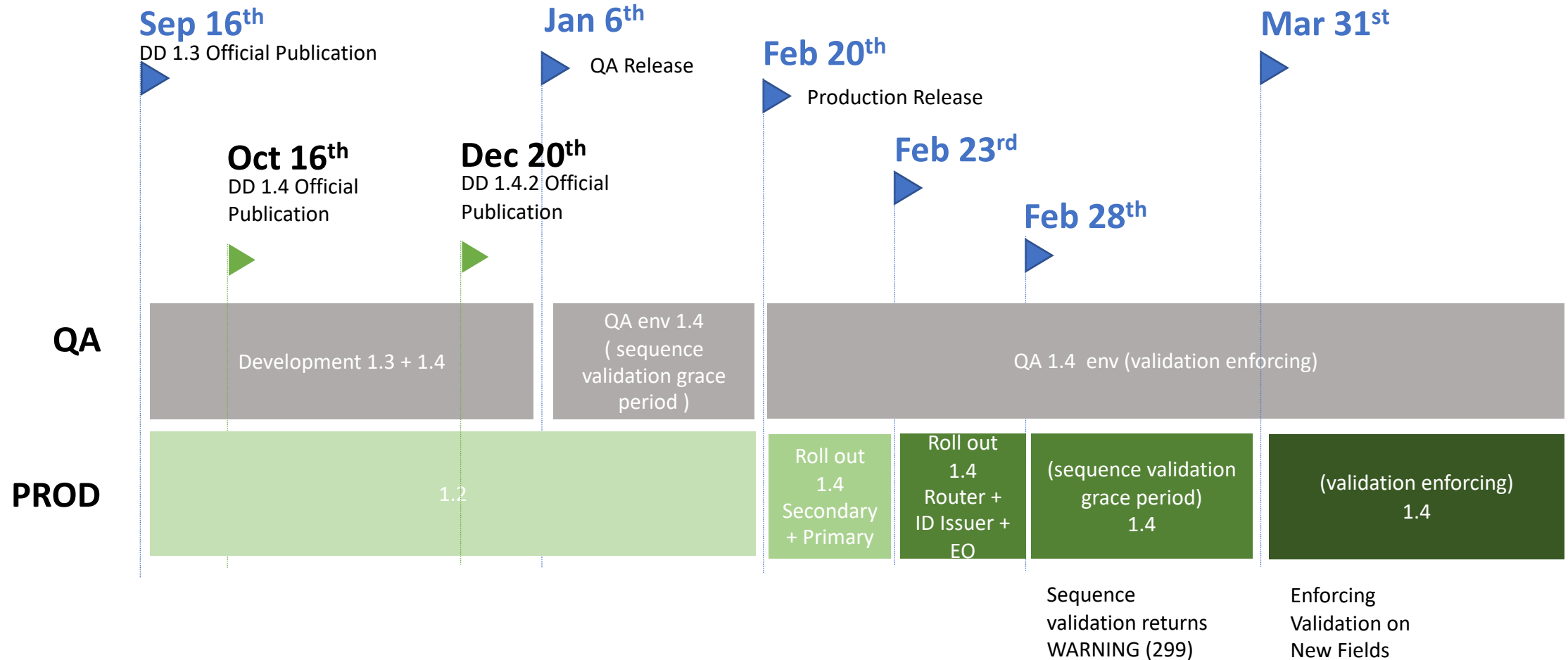
For UIs that have been issued and operated prior to the end of the Sequence Validation Grace Period, those might contain non-conform information. This means that the information used to implement the sequence validation, for these specific UI might not be sufficient to enforce the validation.

If the information available for these UIs, is not sufficient to assess the location and the state, the system should allow the product movement and **bypass the sequence validations.**

The background is a dark, monochromatic scene featuring a series of vertical bars of varying heights and widths. These bars are arranged in a way that creates a strong sense of perspective, receding into the distance. The lighting is soft, casting subtle shadows and highlights on the bars and the floor, which appears to be a reflective surface. The overall mood is futuristic and architectural.

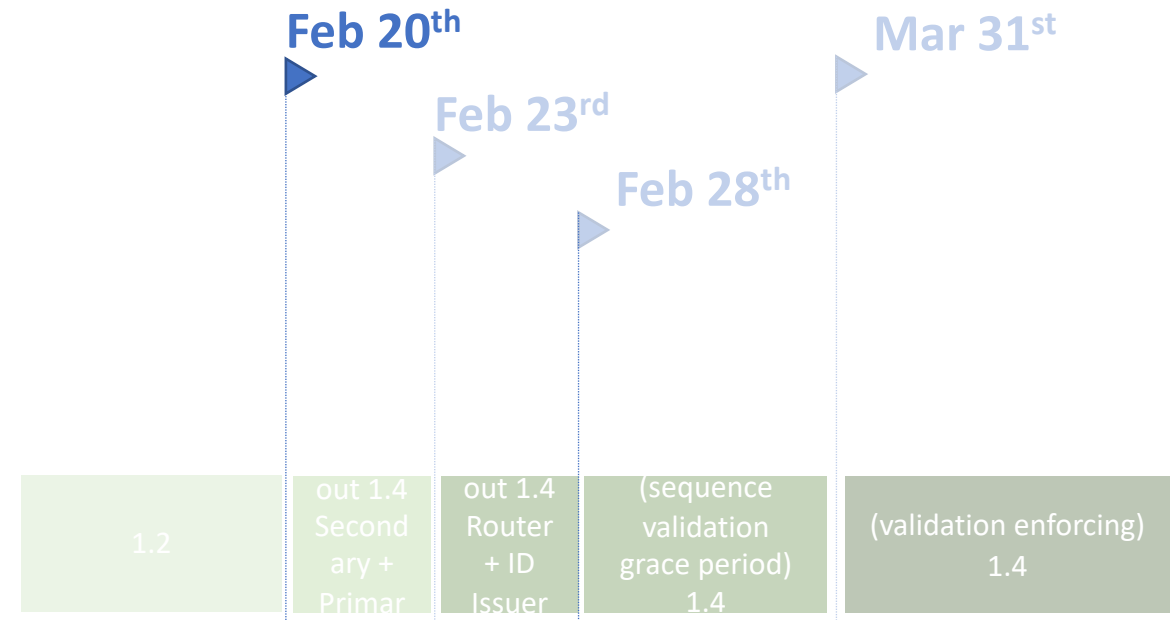
Roll out

Timeline DD 1.3 & DD 1.4 updated



Secondary Repository Rollout

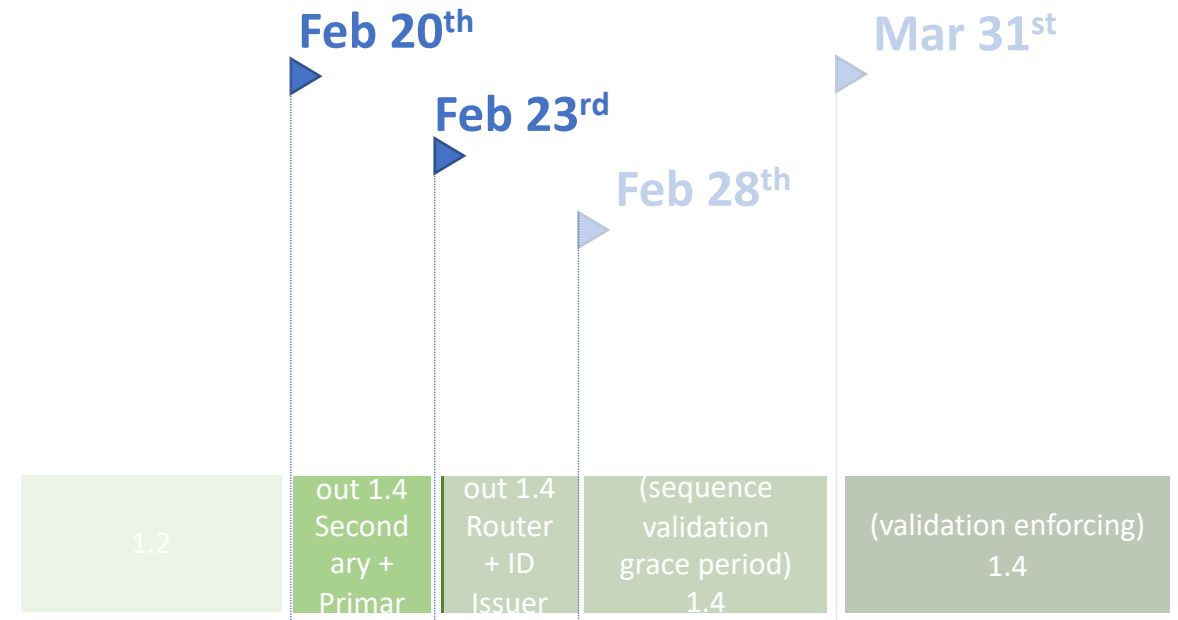
- The Secondary repository 1.4 deployed in compatibility mode (support 1.2 and 1.4)
- The router will return updated error codes
- GRACE PERIOD



Primary Repositories Rollout

- All Primary Repositories will be updated
- Support version 1.2 and version 1.4

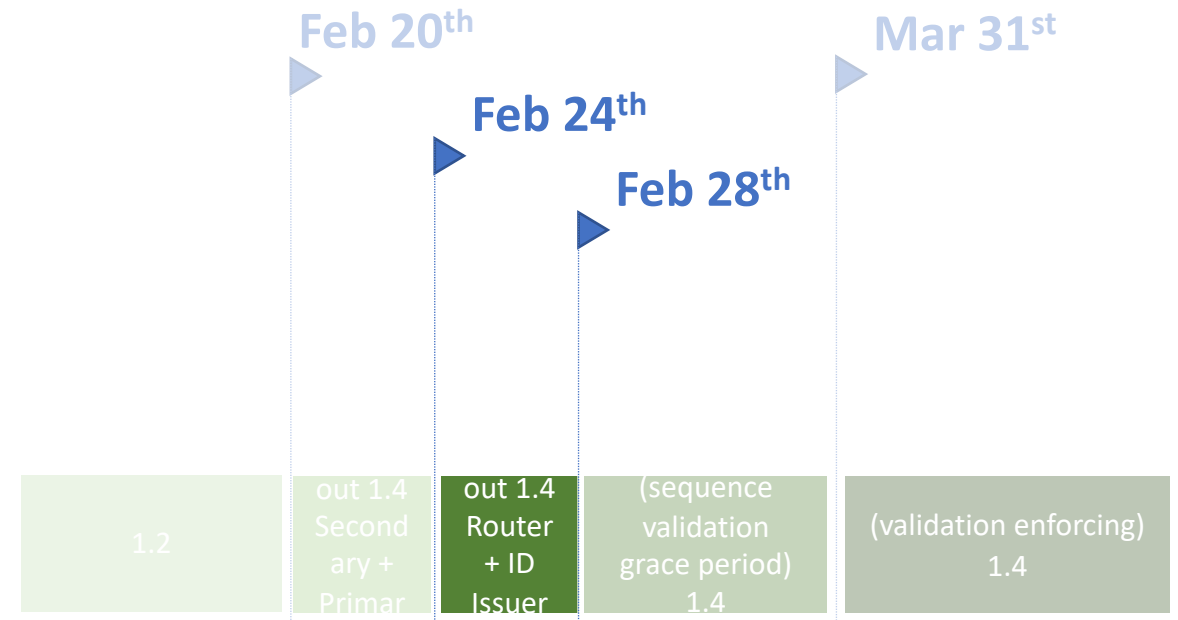
■ GRACE PERIOD



EO Roll out

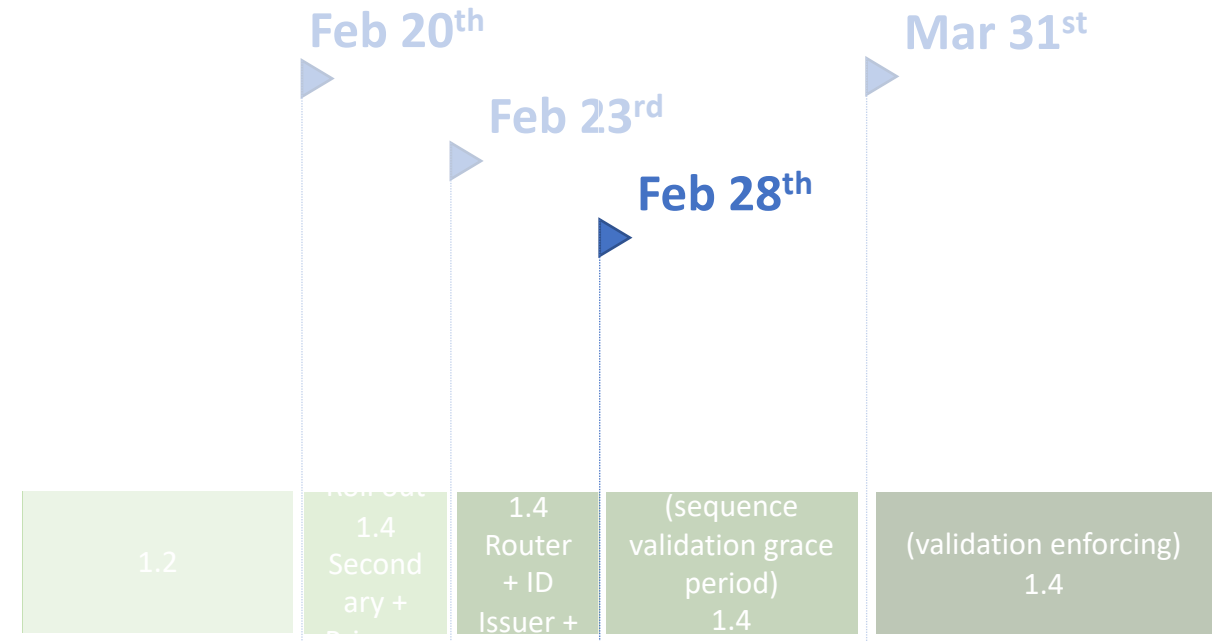
- All Economic Operators including the Distribution will Roll out and update the software.

- GRACE PERIOD



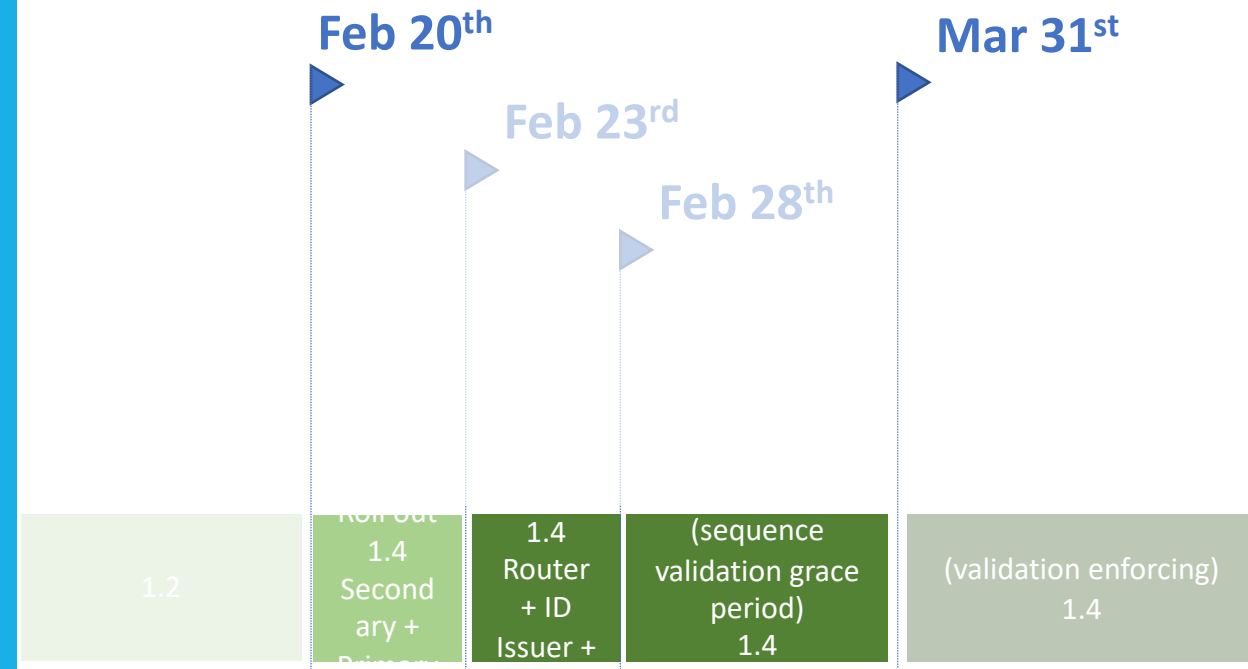
Feb 28th

- API optional Fields become mandatory.
- All system must implement 1.4 interfaces.
- Sequence Validation Grace Period



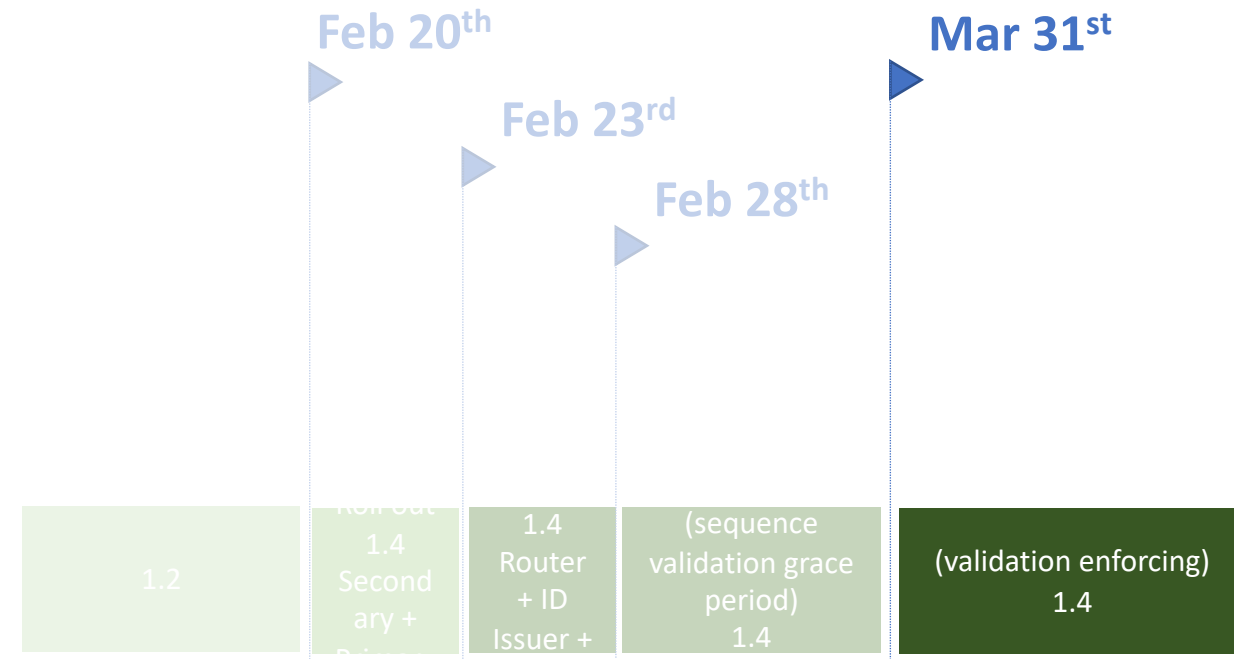
GRACE PERIOD

- Only WARNING will be issued by Router and Primary repositories



March 31st onwards

- Full Validation enforcement



Impact on EO

Preparation for 1.4

Technical

Ensure that the internal systems implement the 1.4 API specifications

- API changes
 - Message Time (time long) for sequence validation
 - Updated Message Size limit
 - Address Fields update (Transactional documents)
 - Error Code List update

Operational

Ensure accuracy of Master Data.

- Product Master Data (TPN TPID)
- EOID FID MID configuration
- Address information

Implement Operational Monitoring of updated error codes and warnings

- Grace Period Warning (299)
- Transition Warning (299)



Q&A

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