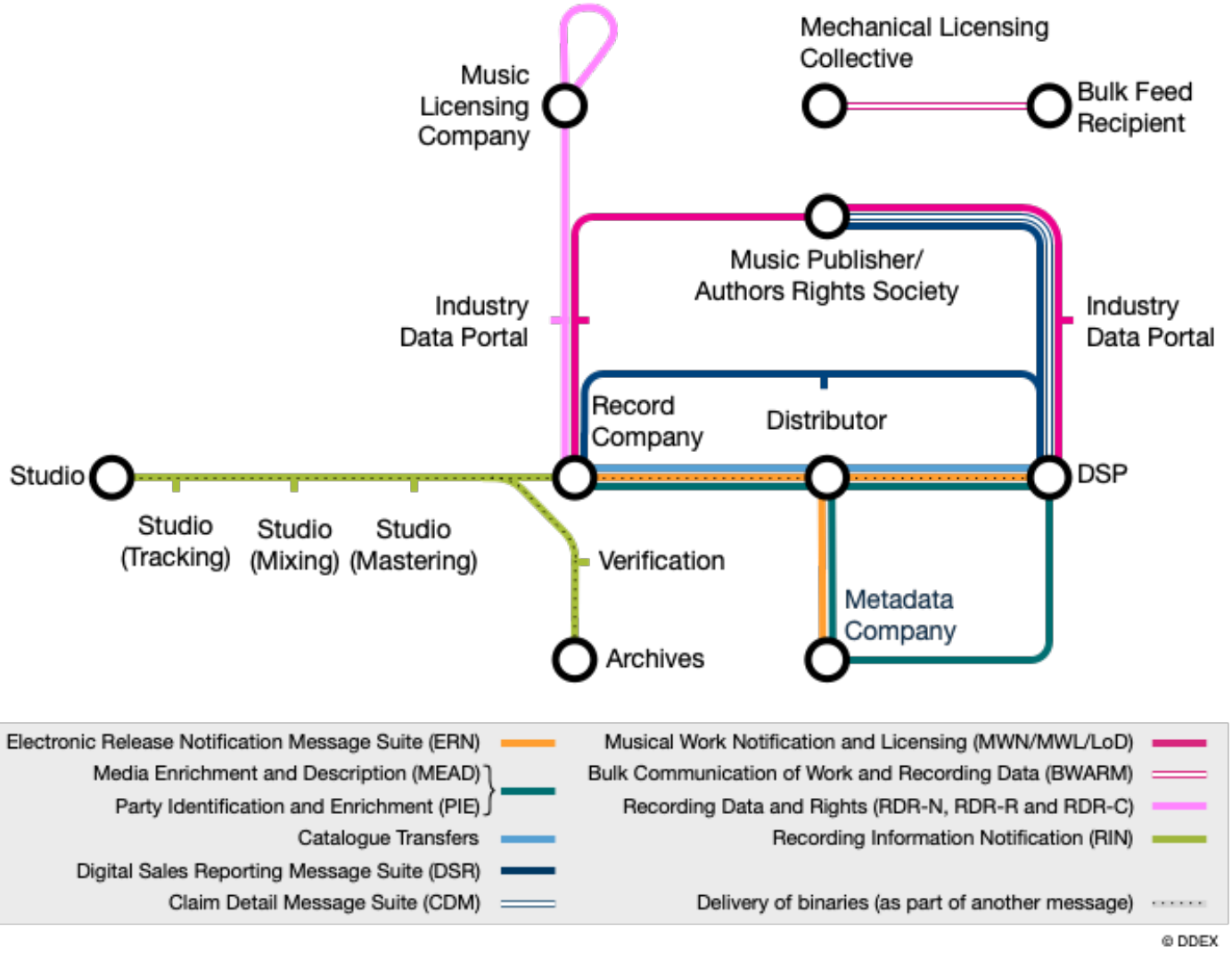
DDEX™
STANDARDISING THE
DIGITAL VALUE CHAIN

Digital Data Exchange (DDEX)

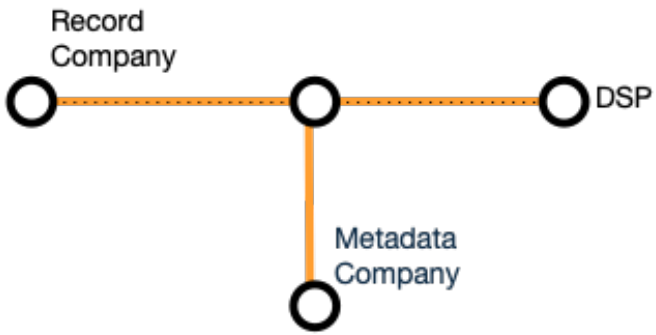
Electronic Release Notification Message Suite (ERN)

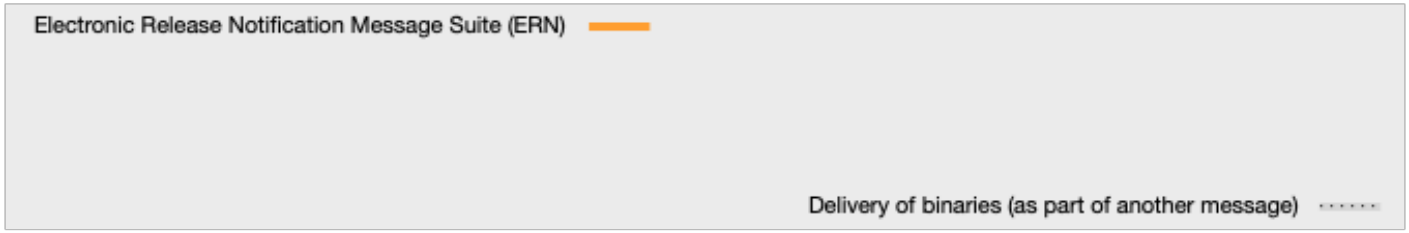
May 2024

DDEX standards



Electronic Release Notification Message Suite





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Electronic Release Notification Message Suite (ERN)

- First ever DDEX standard
- Initial version from 2000
- First DDEX version 2007
- ERN-3 became “the” standard to deliver releases around 2010

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Basic choreography

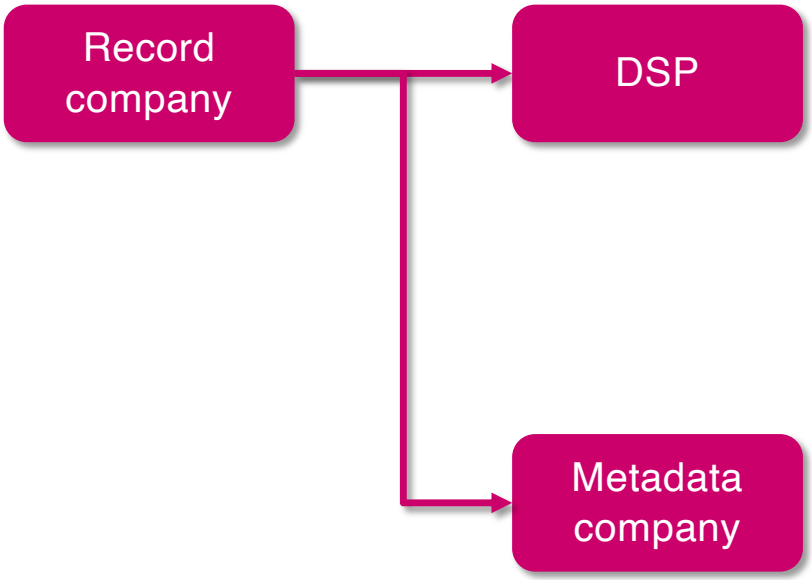
`NewReleaseMessage` for

- Releases
- Deals

`PurgeReleaseMessage` for

- Takedowns

Basic choreography



`NewReleaseMessage` for

- Releases
- Deals

`PurgeReleaseMessage` for

- Takedowns

`NewReleaseMessage` to communicate Release metadata

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Statement of truth

- ERN messages are “statements of truth”
  - When a deal changes or is added **all** metadata needs to be re-sent
    - Descriptive metadata
    - Deals
  - ERN **does not** support updates to individual fields

- Similar approach applies to communication binary files

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Parts of ERN standard version 3

- Electronic Release Notification Message Suite Standard
- ERN Release Profiles
- ERN Business Profiles
- ERN Choreography for SFTP
- ERN Choreography for Web Services

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Parts of ERN standard version 3

- Electronic Release Notification Message Suite Standard
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- ERN Choreography for Web Services

ERN 3.8.3 is the most widely used version

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Parts of ERN standard versions 4.0-4.2

- Electronic Release Notification Message Suite Standard
- ERN Release Profiles
- ~~ERN Business Profiles~~
- ERN Choreography for SFTP
- ERN Choreography for web services

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Parts of ERN standard version 4.3

- ERN Part 1 – Message Definition
- ERN Part 2 – Release Profiles
- ERN Part 3 – Choreography for cloud storage
- ERN Part 4 – Choreography for web services

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From ERN-3 to ERN-4

© DDEX/12

From ERN-3 to ERN-4

- New structure for “territorial data”
- Less data duplication
- More clarity about what data goes where
- Different approach to managing parties

© DDEX/13

Territorial variations of data

- ERN-3
  - One composite containing all data that differs between territories
- ERN-4
  - Individual data elements can carry attributes
    - Language
    - Script
    - Territory

For example:

Suede

or

London Suede

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Territorial variations in ERN-3

© DDEX/15

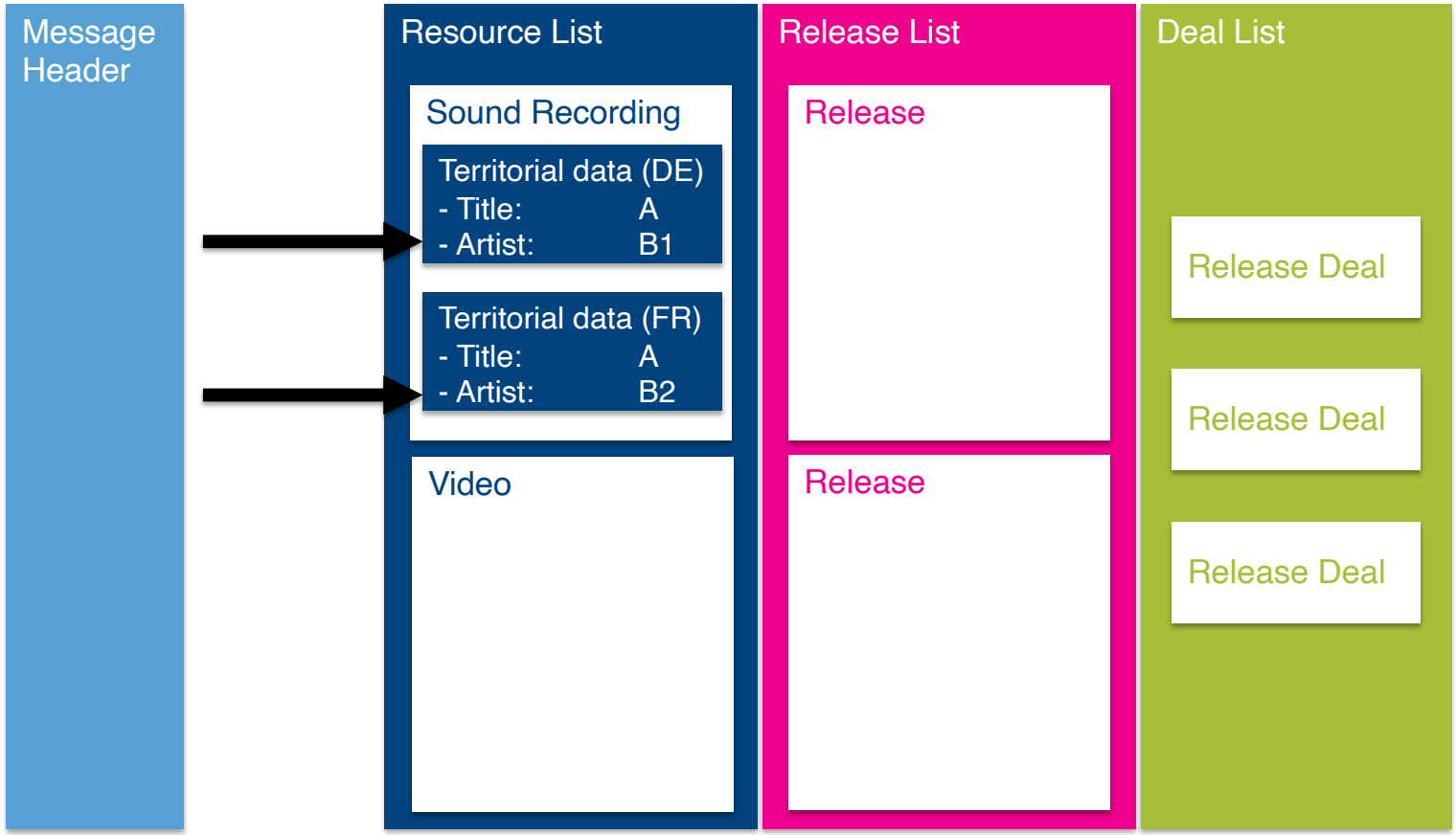
Territorial variations in ERN-3

© DDEX/16

Territorial variations in ERN-3

© DDEX/17

Territorial variations in ERN-3



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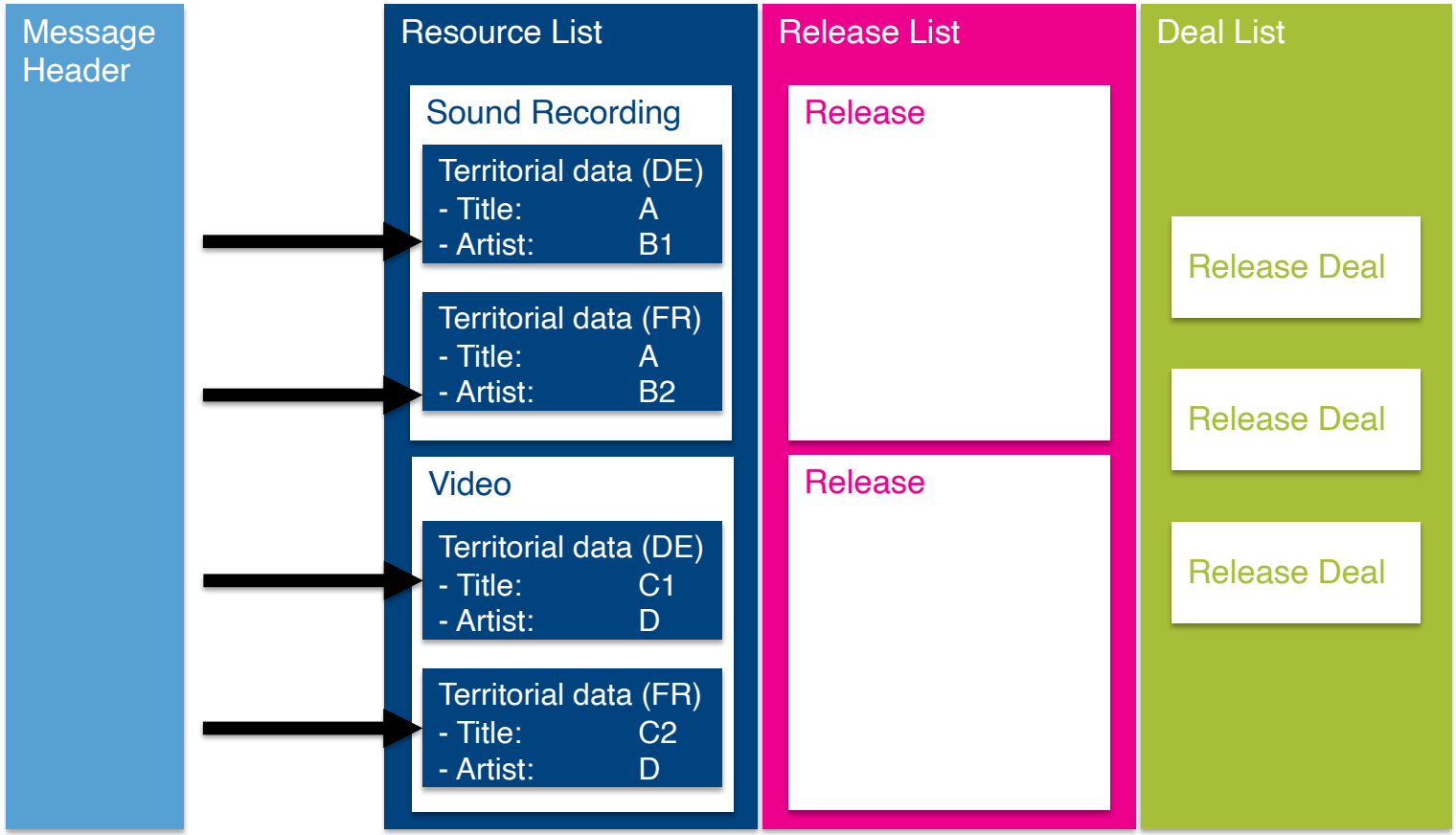
Territorial variations in ERN-3



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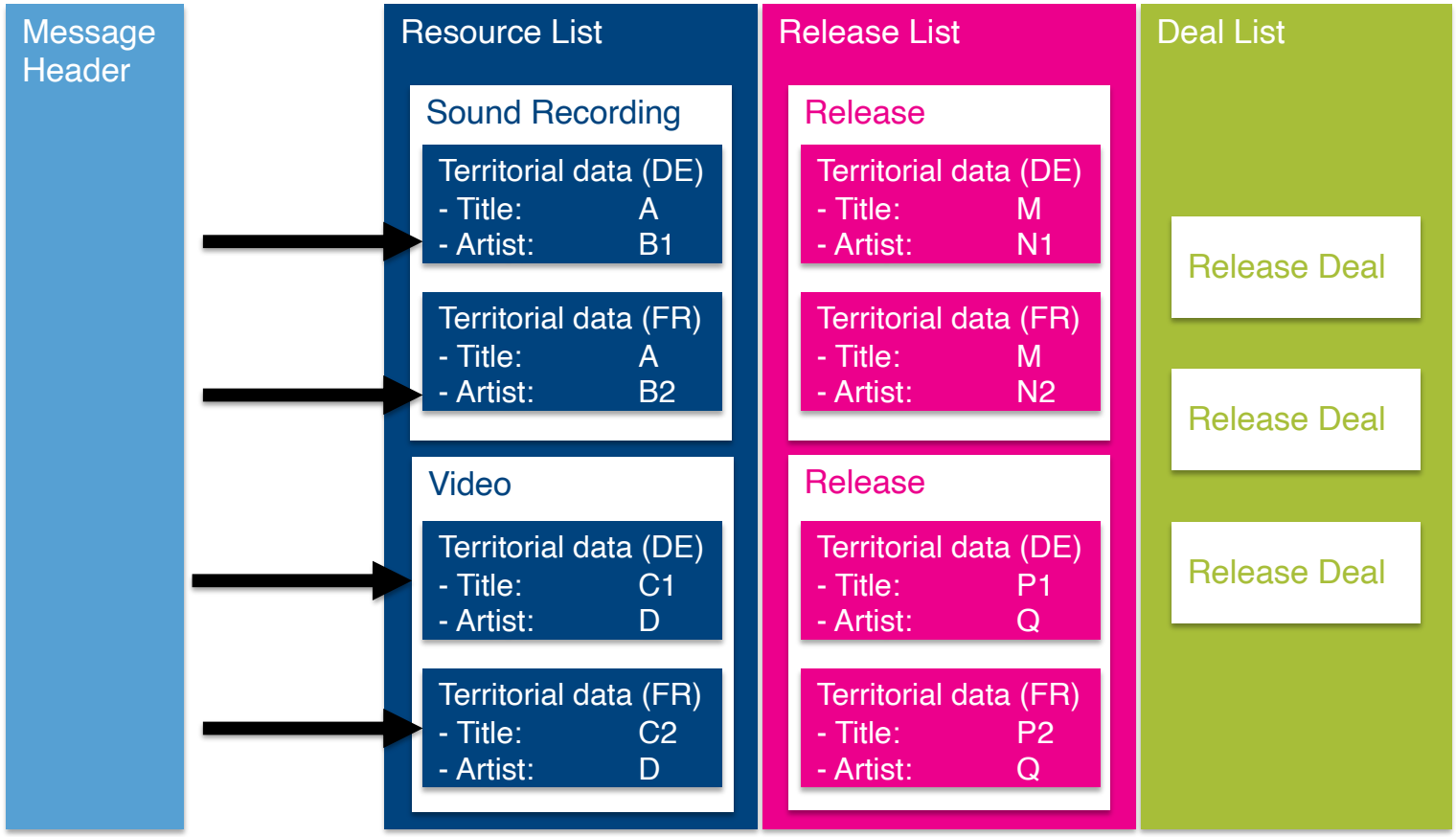
Territorial variations in ERN-3



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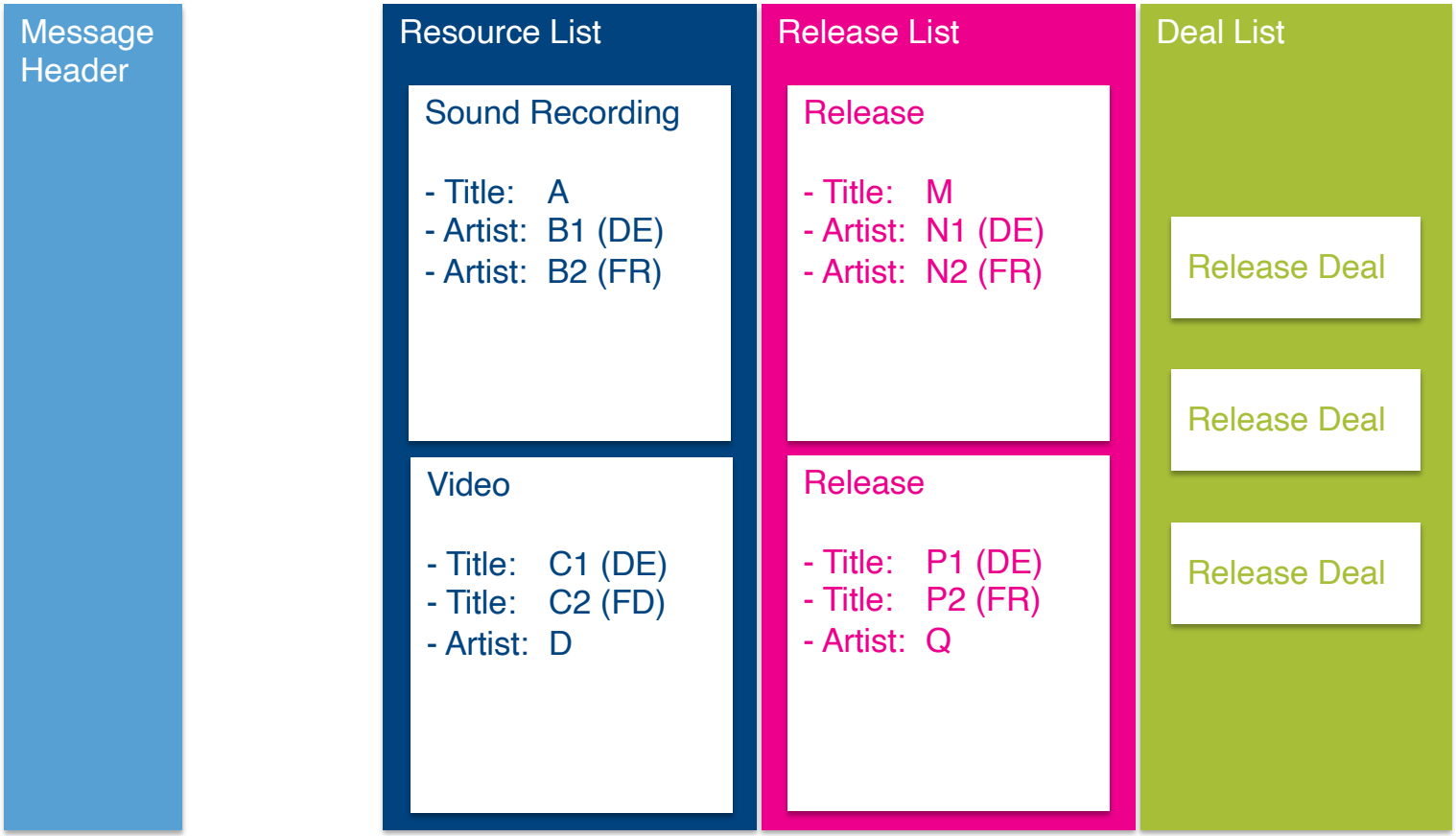
Territorial variations in ERN-4



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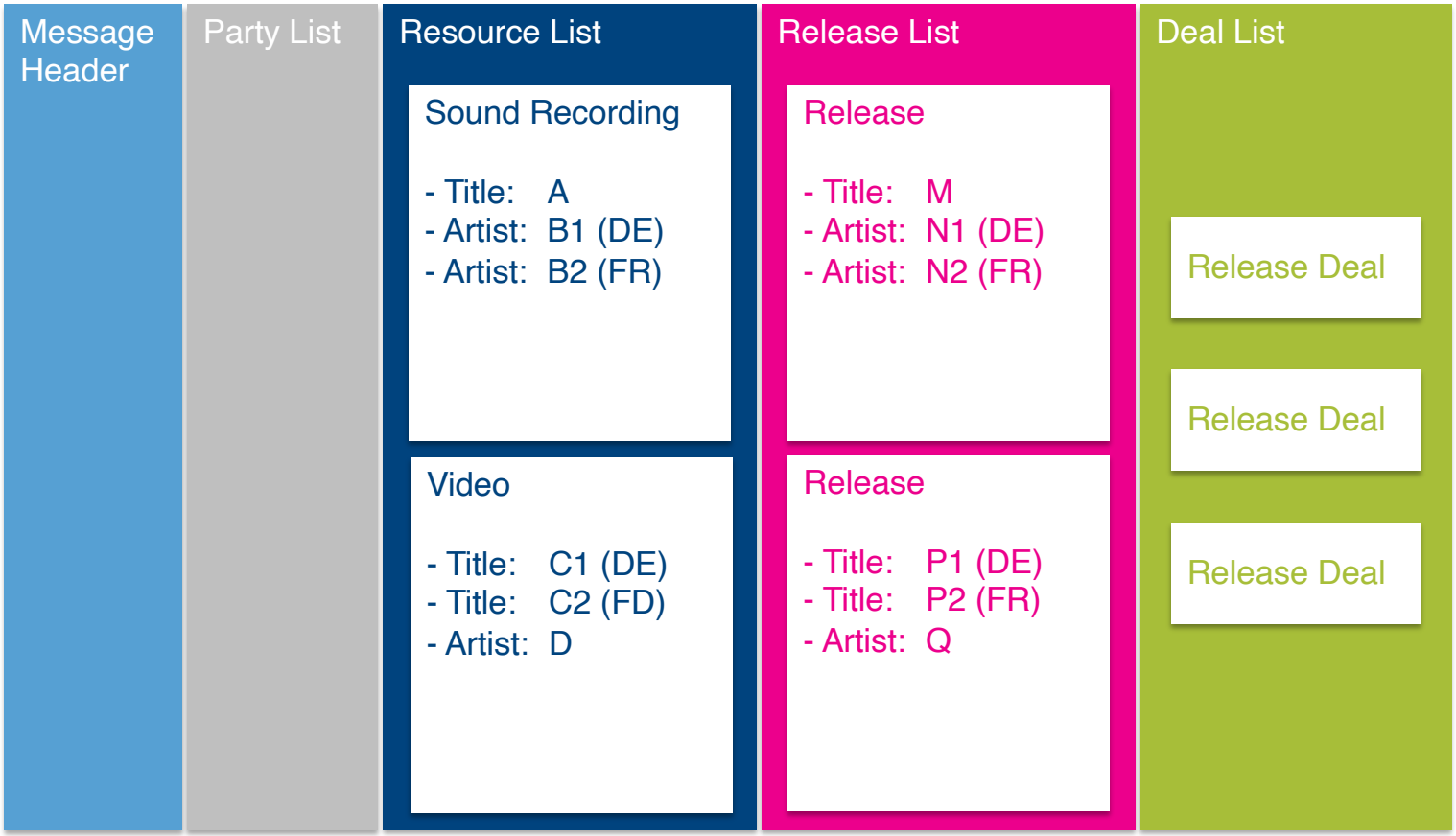
Territorial variations in ERN-4



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From ERN-3 to ERN-4

- New structure for “territorial data”
- Less data duplication
- Less confusion
- Parties

- Track releases inherit most data from “their” resource (usually a sound recording or music video) by means of:
  - New slimmed-down `TrackRelease` composite
  - Better handling of territorial data

© DDEX/23

From ERN-3 to ERN-4

- New structure for “territorial data”
- Less data duplication
- More clarity about what data goes where
- Parties

- In ERN-4 a `TrackRelease` title is only in one place, the `SoundRecording` composite
- In ERN-3 it could be in any of these composites
  - `SoundRecording`
  - `SoundRecordingDetailsBy-Territory`
  - `Release`
  - `ReleaseDetailsByTerritory`

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From ERN-3 to ERN-4

- New structure for “territorial data”
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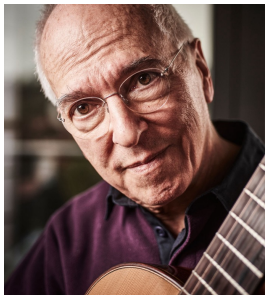
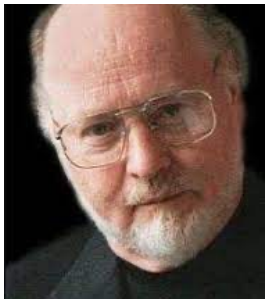


John Williams



John Williams

- ERN-3 allowed a record company to just stipulate “John Williams” for two tracks
- DSP had no idea if it’s the same or different
- ERN-4 forces the record company to identify John Williams (guitarist) from John Williams (composer)

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New in ERN 4.3

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New in ERN 4.3

- Immersive audio
- Marketable clips
- Album visibility dates for streaming services
- Classical music

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Immersive audio

- Immersive audio
- Marketable clips
- Album visibility dates for streaming services
- Classical music

- How are two “editions” of the same sound recording communicated?
- They may have different ISRCs and/or contributor line-ups
- ERN-4.3 supports the two different ways this is being managed by the industry

Immersive audio

- Immersive audio
- Marketable clips
- Album visibility dates for streaming services
- Classical music

- Approach one
  - Treat two editions as one recording
  - Create one release that may grow over time
- Approach two
  - Treat two editions as two recordings
  - Create two related releases
  - Link these recordings (`RelatedResource`) and releases (`RelatedRelease`)

Marketable clips

- Immersive audio
- Marketable clips
- Album visibility dates for streaming services
- Classical music
- Updated handling of “standalone clips” and “previews”
- Clips
  - Can have different metadata from their “parent”
  - Can have their own `Deal`

Marketable clips

- Immersive audio
- Marketable clips
- Album visibility dates for streaming services
- Classical music

- Impact on file naming
  - Need to have multiple files for each edition, especially for hi-res videos
  - Some files are shared between editions, for example, an immersive audio track used for audio and for a music video
  - Therefore multiple clips for each edition

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Album visibility dates

- Immersive audio
- Marketable clips
- Album visibility dates for streaming services
- Classical music

- Visibility dates moved from `DealTerms` to its own composite
- Enables setting of preview dates to the album release for which no deal is provided
- Especially true for streaming DSPs

Classical music

- Immersive audio
- Marketable clips
- Album visibility dates for streaming services
- Classical music

Better handling of hierarchical titles

Display Data

- Provide one string that contains the title in a form considered to be best, by the record company
- Usual form:
  Composer-last-name: title-of-work, title-of-movement

“Raw” Data

- Provide
  - Last name of composer
  - Title of the work
  - Sequence number of movement
  - Title of the movement
- DSP can compile this data as it sees fit

Better handling of hierarchical titles

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Beethoven: Symphony No. 9 in D minor, Op. 125. 4. Finale (“Ode to Joy”)

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© DDEX/35

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Beethoven: Symphony No. 9 in D minor, Op. 125. 4. Finale ("Ode to Joy")	Finale ("Ode to Joy") from Beethoven's Symphony No. 9 in D minor, Op. 125

Better handling of hierarchical titles

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Release profile states that a label must provide data in **both** forms

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Clearer rules on contributors and display artist

- Contributors
  - Anyone who contributed to the work
  - Anyone who contributed to the recording
  - From soloist to the tea lady

- Display artists
  - Name on the front of the album cover
  - Basically a brand

Example

- Composer
  - Ludwig van Beethoven
- Conductor
  - Leopold Stokowski
- Orchestra
  - London Symphony Orchestra
- Choir
  - London Symphony Chorus
- Soloists
  - Helen Watts
  - Heather Harper
  - Alexander Young
  - Donald McIntyre

- All to be communicated as
  - `Contributor` with relevant role codes
  - `DisplayArtist` and `DisplayArtistName`

- Composer must have
  - `DisplayArtistRole` set to `Composer`
  - `IsDisplayedInTitle` can be set to indicate that the composer name should be displayed as part of the title
  - Two names: `KeyName` and `FullName`

To put it all together into XML

- List all contributors and display artists in `PartyList`
  - Make sure composer has `FullName` and `KeyName`
- Collate all title parts
  - Movement → `ReferenceTitle`
  - Concerto → `GroupingTitle`
  - Composer name (ideally just last name)
- Assemble all title parts into a `DisplayTitle` and `DisplayTitleText`
- List all contributors and display artists in the message
  - The composer needs special treatment

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Use MEAD for richer metadata:

- Epoch
- Key notes
- Time signature
- Instruments
- etc…

A final word on versions

- ERN-4 offers significant benefits over ERN-3
  - ERN 3.8 is the most used version
  - Some implementers are “extending” ERN-3 to do what ERN-4 is designed to do

- Since ERN 4.3 was published in 2022, ERN-3 is no longer supported
  - Text has been removed from the knowledge base
  - Eventually the XSDs will be removed as well

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