



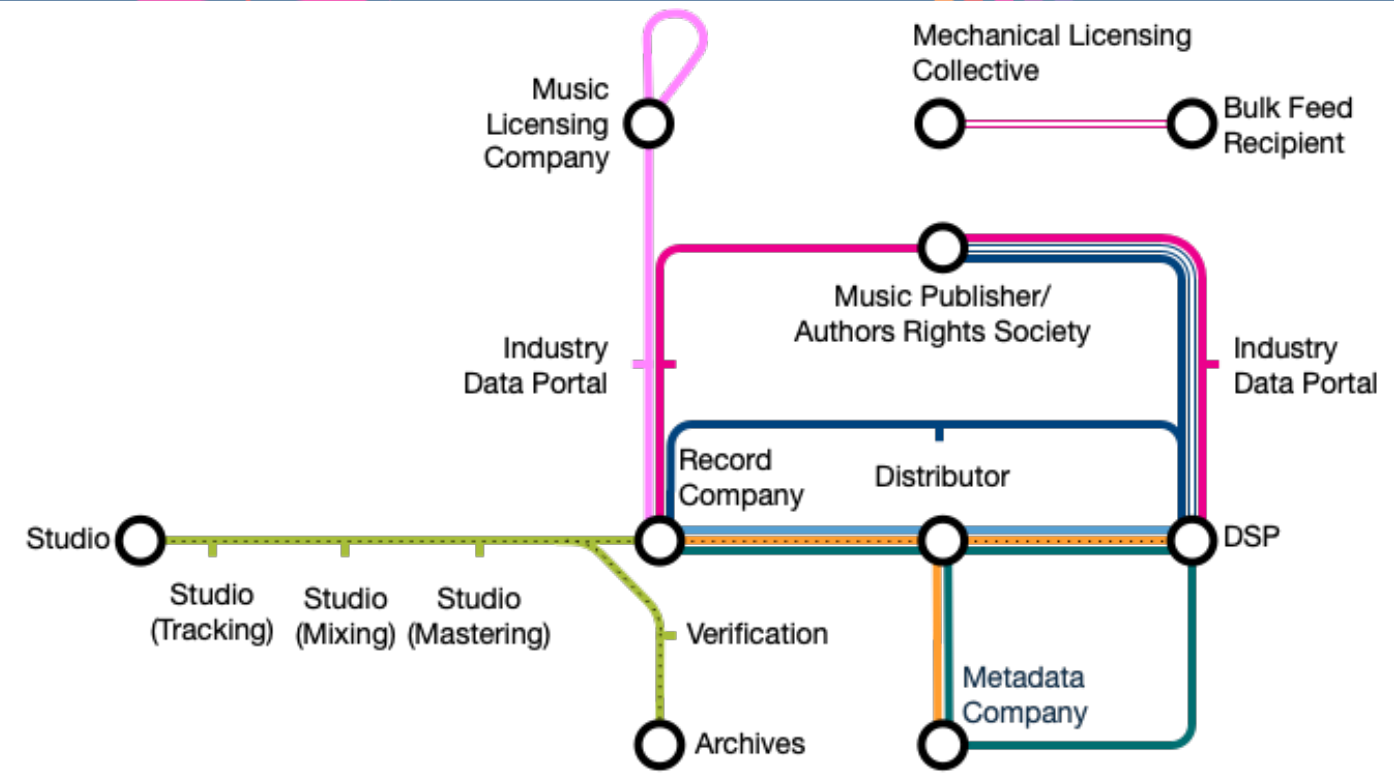
# Digital Data Exchange, LLC (DDEX)

## Electronic Release Notification Message Suite (ERN)

September 2023

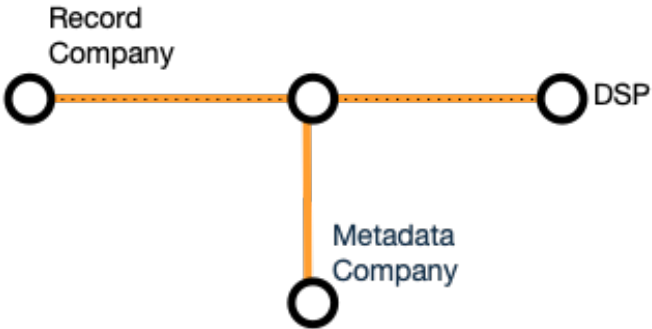


# DDEX standards



Electronic Release Notification Message Suite (ERN)	Orange line	Musical Work Notification and Licensing (MWN/MWL/LoD)	Pink line
Media Enrichment and Description (MEAD)	Teal line	Bulk Communication of Work and Recording Data (BWARM)	Red line
Party Identification and Enrichment (PIE)	Blue line	Recording Data and Rights (RDR-N, RDR-R and RDR-C)	Purple line
Catalogue Transfers	Light blue line	Recording Information Notification (RIN)	Green line
Digital Sales Reporting Message Suite (DSR)	Dark blue line	Delivery of binaries (as part of another message)	Dotted line
Claim Detail Message Suite (CDM)	Light blue line		

# Electronic Release Notification Message Suite



Electronic Release Notification Message Suite (ERN) ———

Delivery of binaries (as part of another message) - - - - -

## 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

# Basic choreography



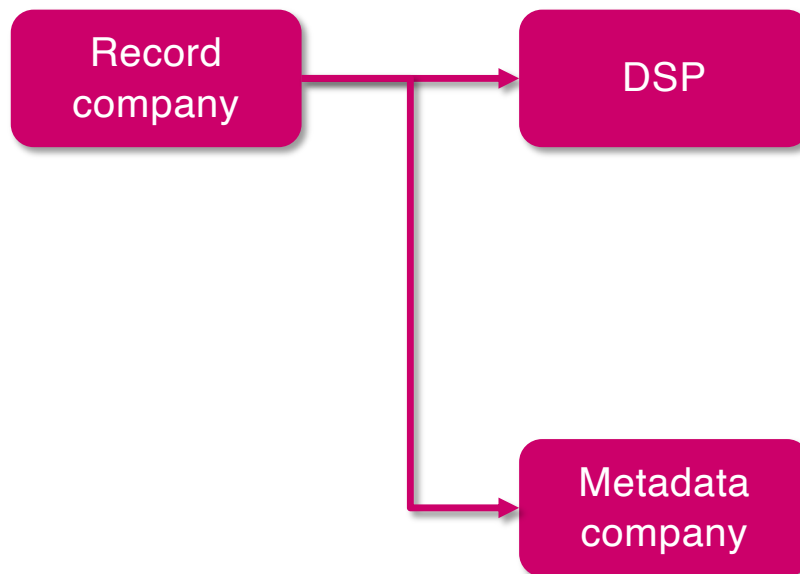
`NewReleaseMessage` for

- Releases
- Deals

`PurgeReleaseMessage` for

- Takedowns

# Basic choreography



`NewReleaseMessage` for

- Releases
- Deals

`PurgeReleaseMessage` for

- Takedowns

`NewReleaseMessage` to  
communicate Release  
metadata

# 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

## ERN standards (ERN-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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- Electronic Release Notification Message Suite Standard
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ERN 3.8.3 is the most widely used version

## ERN standards (ERN 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

## ERN standards (ERN 4.3)

- ERN Part 1 – Message Definition (4.3)
- ERN Part 2 – Release Profiles (2.3)
- ERN Part 3 – Choreography for cloud storage (1.8)
- ERN Part 4 – Choreography for web services (1.7)

# From ERN-3 to ERN-4

## 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

# 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

# Territorial variations in ERN-3

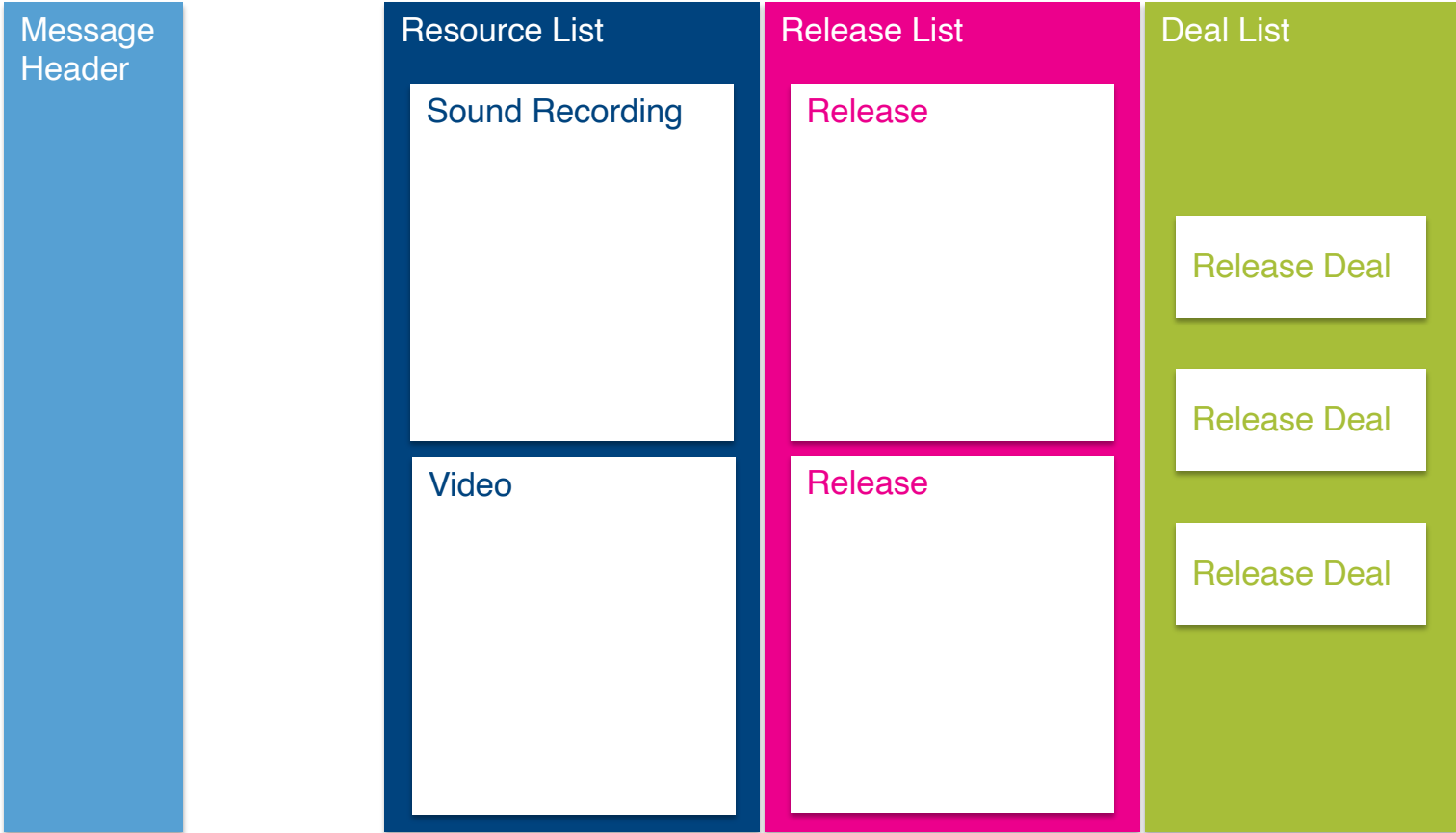
Message  
Header

Resource List

Release List

Deal List

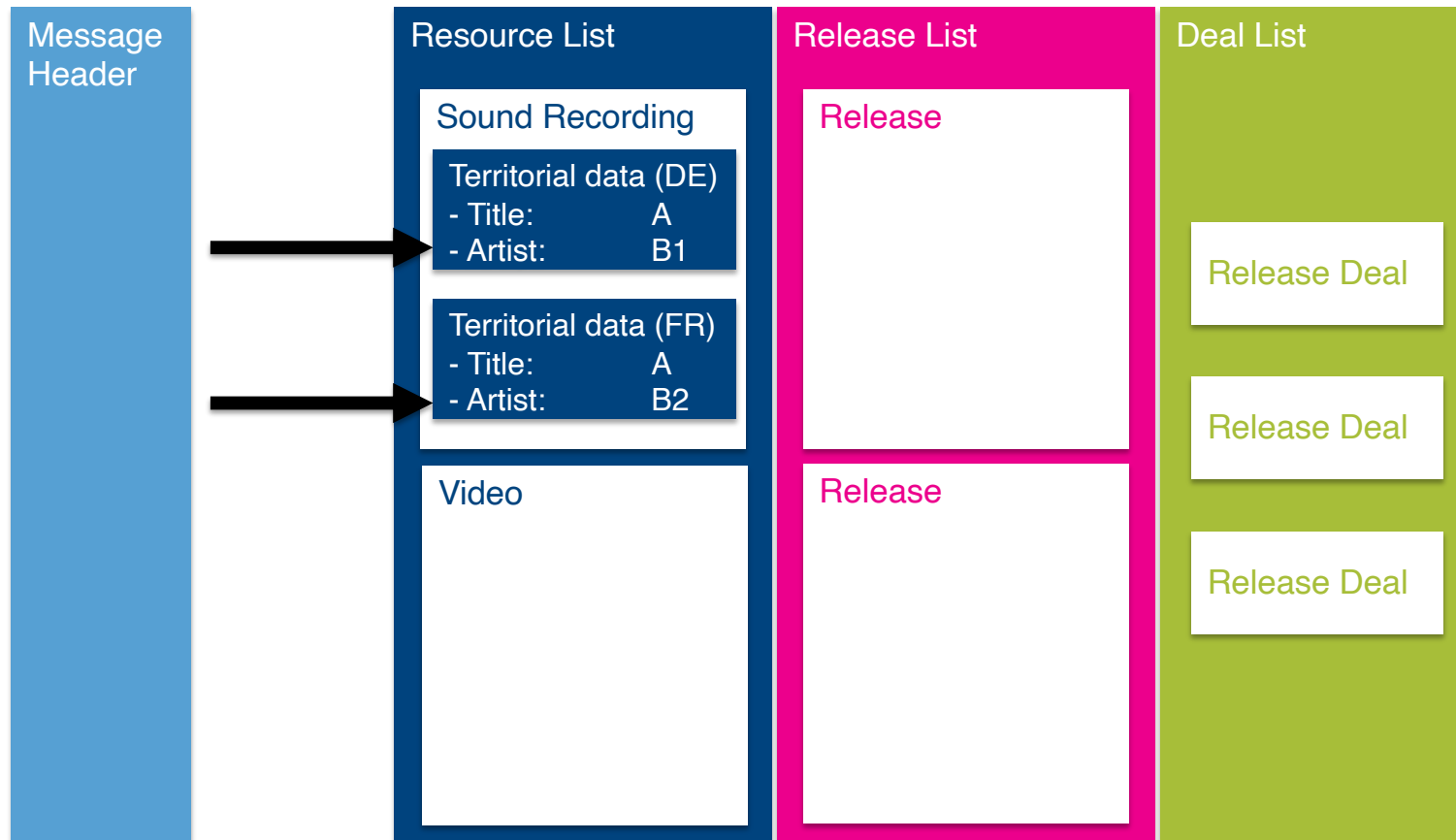
# Territorial variations in ERN-3



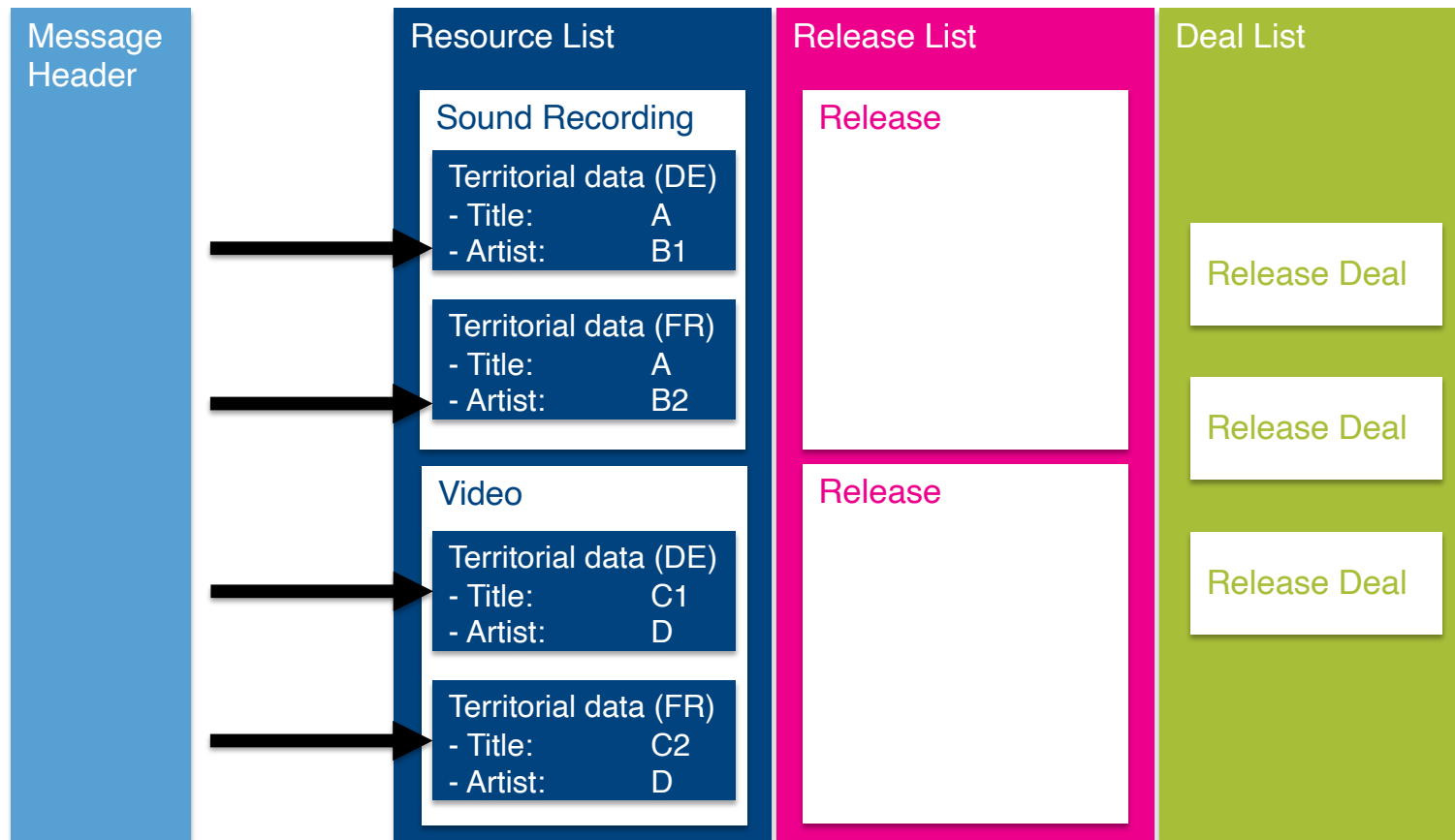
# Territorial variations in ERN-3



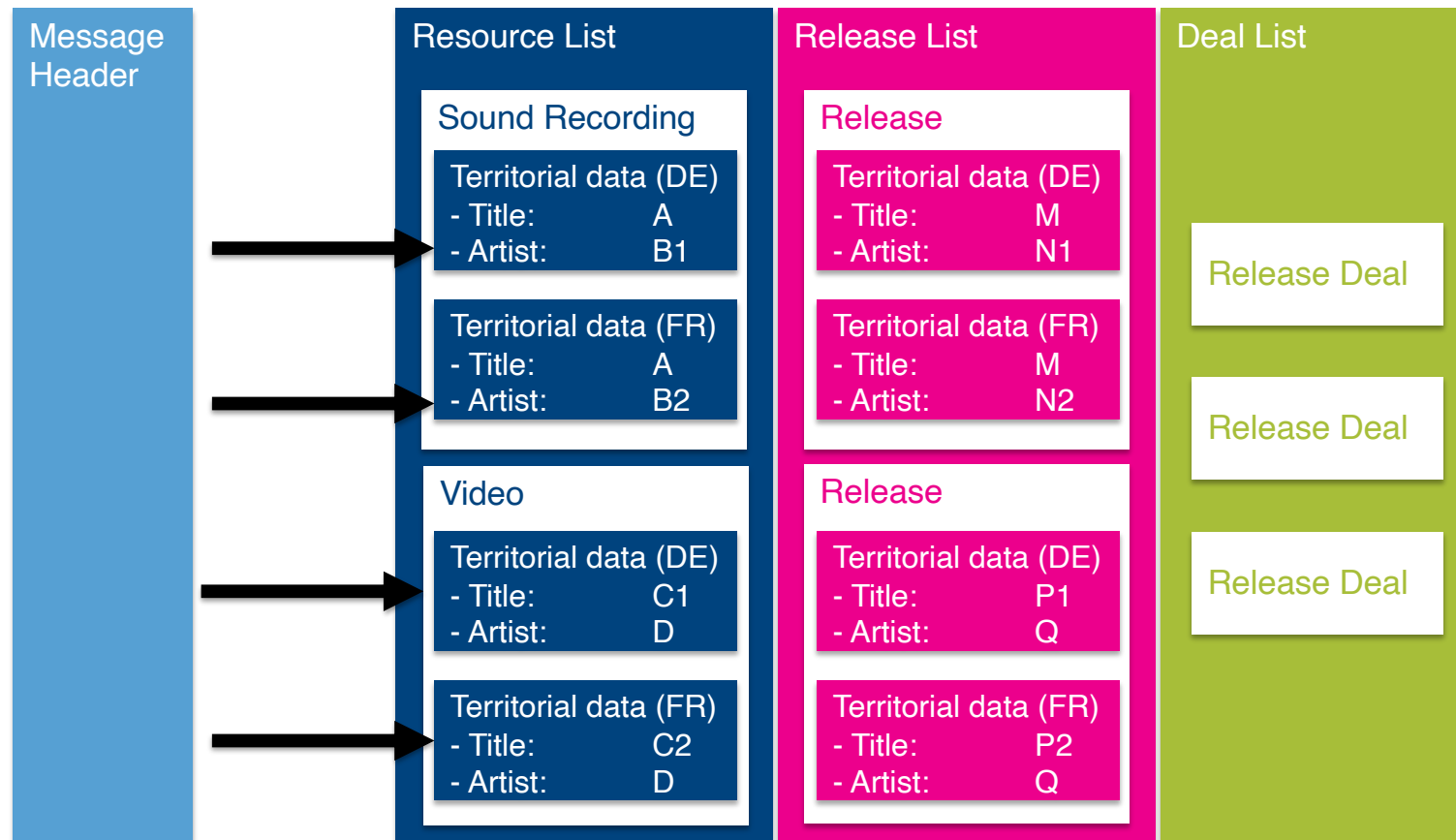
# Territorial variations in ERN-3



# Territorial variations in ERN-3



# Territorial variations in ERN-3



# Territorial variations in ERN-4



# Territorial variations in ERN-4



## From ERN-3 to ERN-4

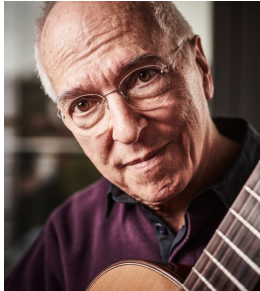
- New structure for “territorial data”
- **Less data duplication**
- Less confusion
- Parties
- Track releases inherit most data from “their” resource (usually a sound recording or music video) by means of:
  - New slimmed-down `TrackRelease` composite
  - Better handling of territorial data

## From ERN-3 to ERN-4

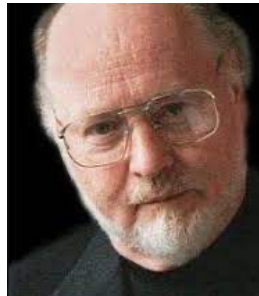
- New structure for “territorial data”
- Less data duplication
- More clarity about what data goes where
- Parties
- In ERN-4 a `TrackRelease` title is only in one place, the `SoundRecording` composite
- In ERN-3 it could be in any of these composites
  - `SoundRecording`
  - `SoundRecordingDetailsByTerritory`
  - `Release`
  - `ReleaseDetailsByTerritory`

## From ERN-3 to ERN-4

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



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)

# New in ERN 4.3

## New in ERN 4.3

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

# 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

# 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

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

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Finale (“Ode to Joy”) from Beethoven’s  
Symphony No. 9 in D minor, Op. 125

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

# 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...

**Support for ERN-3 will end**

# 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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