



# DDEX Handbook

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# 1 Introduction

This document is the DDEX Handbook, aimed at explaining the benefits and process of using DDEX Standards to decision makers and operational personnel. DDEX is also publishing technical handbooks, specifically aimed at a technical/operational audience, covering the intricate details of implementing and using DDEX.

This initial version of the DDEX Handbook focuses on Release Notifications; future versions will also address sales reporting and other aspects of the digital supply chain. It covers the following areas:

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## 2 What is DDEX?

DDEX (typically pronounced “Dee-Dex”) stands for “Digital Data Exchange.” It is a membership organisation that was set up to address the challenges in moving from a physical music supply chain to a digital music supply chain.

DDEX was launched in May of 2006 by the major record labels, major music rights societies in North America and Europe and leading digital and mobile music service providers. Since the release of the first DDEX standards, adoption of the standards has increased greatly, throughout businesses along the music supply chain.

Additional information on DDEX is available from <http://ddex.net>. Please contact DDEX at <mailto:info@ddex.net>.

Please note that Section 7 of this Handbook provides a list of essential terms and their definition.

## 3 Why DDEX?

Businesses along the music supply chain have long experienced a lack of standardised data exchange formats and protocols. This has resulted in significant inefficiencies in ingesting and processing data.

DDEX greatly alleviates these inefficiencies by developing standards for the communication and management of metadata. Some benefits are:

- As DDEX standards become more widely adopted, there will no longer be a need for business partners to manage multiple proprietary formats;
- Faster time to market;
- Improved operational quality;
- Improved data quality;
- Shared cost reductions between partners throughout the digital supply chain;
- Less duplication of work; and
- Reduced data feeds (inbound as well as outbound).

Other industries have already benefited from such automated exchange of information. One such example is the way mobile phone operators exchange roaming information: Without global standards it would be virtually impossible to use a mobile phone abroad; the communication about whether a specific phone may be used on a foreign carrier, and

whether its user still has credit available needs to be fast, seamless and without human interaction. This can only be achieved by using standards.

## 4 Release Notification

### 4.1 Release Notification Message Standard

The Electronic Release Notification Message Suite Standard (informally called the “Release Notification Message Standard”, see URL) is one of several XML message formats published by DDEX. Release notifications are messages that record labels or aggregators send to distributors to inform them of new releases that are available for distribution, and the terms and conditions under which such releases can be made available.

The Release Notification Message Standard addresses the problem of a record company or aggregator having to send its products to distribution partners in multiple formats. It can be used for everything from a single release with a single deal, to the communication of a sales campaign that includes price changes over the course of time. Its three main elements are Resources, Releases, and Deals. Resources are the primary assets such as audio or video tracks, and also secondary assets such as cover images and PDF booklets. Releases are the principal products that encompass the resources, and Deals are the descriptions that define how a Release may be used.

### 4.2 Profiles of the Release Notification Message Standard

The Release Notification Standard (see URL) is quite large to accommodate the numerous business models in use today within the digital music supply chain. In order to reduce the complexity for implementing organisations, DDEX has developed two complementary standards to assist with this process.

The profile standards define subsets of the full standard for the most common types of Releases and Deals — thus making an implementation straightforward and comparatively simple — by differentiating different kinds of business models (e.g. Download Services, Subscription Streaming Services, Web Radio, etc.) and different kinds of Releases (e.g. albums, singles, classical albums, ringtones, etc.).

### 4.3 Release Delivery Choreography Standard

The Release Delivery Choreography Standard (see URL) provides a rich set of capabilities developed by DDEX that allows small niche firms to large multinational companies to utilise the Release Notification Standard.

The most basic specification — using FTP — is designed to be simple to implement, but has no additional functionality allowing customisation or visibility into the supply chain. At the other end of the scale, the more granular specification — using web services — allows considerable additional flexibility, much greater visibility and a more efficient supply chain.

## 5 Other DDEX Standards

DDEX has also developed a wide range of other standards (see URL), including:

- The Digital Sales Reporting Message Suite Standard for reporting sales and usage information to a record company, publisher or music rights societies;
- A choreography standard for exchanging such sales reports;
- The Musical Works Licensing Message Suite Standard for facilitating the process of acquiring licences to musical works;
- A choreography standard for using the works licensing standard for mechanical licences in Canada;
- A choreography for using the Release Notification Standard to inform business partners about a transfer of a catalogue; and
- A message suite standard for communicating repertoire and usage information amongst music licensing companies.

Information on these standards will be added to this handbook at a later stage.

## 6 How to implement DDEX's Release Notification Message Standard?

### 6.1 Getting Started

The first step to DDEX implementation is to obtain a copy of the standards and XML. They are freely available from the DDEX website at URL.

If you want to start using the standards, you need to acquire a free DDEX implementation license. The implementation license registers your organisation with DDEX, issues you a DDEX party ID (DPID) for use in message exchanges with other organisations, and grants you access to the DDEX standards documentation. Information can be found on the DDEX website at URL.

You may also consider taking an active role in future DDEX standards development by becoming a member (see URL for details). However, non-membership does not preclude usage of the standards.

## 6.2 Choose a Profile

Depending on the commercial setup, an implementer should look whether one of the profiles of the Release Notification Message Standard might be applicable. The profiles are defined into two standards:

- A “Business Profile” standard, defining the necessary fields for describing common Deal types (see URL); and
- A “Release Profile” standard, defining the necessary fields for describing common Release types (see URL).

The information to populate in the Deal portion of the Release Notification Message would be determined after mapping your organisation’s business model to the corresponding Profile or Profiles.

Together the Business and Release Profiles define how to use the Release Notification Standard to express the most common types of Releases correctly. Your engineering team can quickly focus on the portions of the standard needed to implement a particular profile accurately and without necessarily reviewing the entire suite.

## 6.3 Select an Implementation Partner

After completing the steps above, the next step is finding available partners with whom to exchange messages. DDEX maintains an implementation registry describing organisations who have implemented DDEX standards, such as the standards for the Release Delivery process. The register is available at [URL](#). While this register is not complete — no one is obliged to inform DDEX of the status of implementation — it might be helpful in determining a suitable partner.

If your particular organisation is unable to take on a DDEX implementation, it may be able to use an “aggregator” company. These companies are licensed to send and/or receive DDEX messages on behalf of their clients. Note: Such companies are not officially endorsed by DDEX and have no official relationship with DDEX other than as DDEX members or licensees.

## 6.4 Choose a Choreography

Companies interested in using the Release Notification Standard will need to choose a choreography suitable for their needs. The DDEX choreographies are defined in the Choreography Standard for Release Deliveries standard (see URL) as described above.

They will need to discuss the choice of choreography with their business partner(s) to ensure compatibility.

### 6.4.1 FTP

The most basic choreography uses FTP to transfer both metadata and Resource files. It allows for either a product-by-product delivery giving the fastest ingestion speed, or batching, allowing for simpler processing. In addition, a manifest file with the batches gives details of the products within the batches, including high-level product details, priority and content type.

### 6.4.2 Asymmetric Web Service Architecture

This is an approach where only one of two partners in a communication publishes a web service. This approach is significantly simpler to implement than a symmetric web service architecture but which can be made to offer equivalent functionality at the cost of additional web traffic. The main disadvantage of the asymmetric web service architecture is that the partner publishing the web service cannot contact its partner proactively.

### 6.4.3 Symmetric Web Service Architecture

This is the approach where both partners in a communication publish a web service. This approach is more complex to implement than an asymmetric web service architecture. The main advantage of the symmetric web service architecture is that both partners can proactively contact their partner.

## 6.5 Technical Handbooks

The technical handbooks (available from URL) provide supporting documentation to help companies implement and successfully integrate the Release Notification Standard into their existing infrastructure.

The content provides a common correct approach to implementation via XML code examples. These documents are intended for a technical audience and the reader is expected to be familiar with the DDEX messaging standards as well as with any underlying standards such as XML Schema.

## 6.6 Use Case:

### Warner Music Group's Partner Implementation

Warner Music Group (WMG) sends out start-up documentation to the digital partner, which includes DDEX documentation. At that point, WMG also direct them to the DDEX web site and request that they sign up for an implementation license.

The WMG account manager will then:

1. Contact the partner to walk them through the DDEX standards, and answer any questions. Along with WMG's standard documentation, the digital partner will also find the following in-formation:
  - A document detailing the XML data definitions showing the XML tags used by WMG in detail;
  - Multiple samples for the relevant Release Notification Standard (Version 3.3) for the digital partner to review (included are audio and video singles, albums, ringtones, con-certs, lifecycles, territory takedowns, etc.);
  - An overview document that explains the communication and interaction of five different sections of Release Notification messages:
    - Message Header;
    - Update Indicator;
    - Resource List;
    - Release List; and
    - Deal List;
  - A comparison of the DDEX Release Notification Standard to WMG's old XML format (for partners migrating from WMG's old XML format to DDEX) showing the difference between the WMG XML and version 3.3 of the Release Notification Standard; and
  - A comparison of the current version of the Release Notification Standard with previous versions (for partners upgrading from an older version of the Release Notification Standard);
  - A detailed description of the ftp delivery process, showing the structure and choreography of FTP architecture defined in the Release Notification Choreography standard;
2. Create samples for partner to review, test with their systems, and approve. These samples will include:
  - Inserts: These are the initial deliveries, which include as-sets;
  - Territory updates: These are metadata-only and will show any territory additions and removals (takedown);
  - Price updates: These show all album-level and track-level price changes; and
  - Takedowns: These indicate that a product needs to be re-moved; and

Once the partner shows that they can ingest the samples, WMG move the account to production and the DSP can start receiving regular de-liveries.

## 7 Definitions and Terminology

Aggregator — A company that sends or receives DDEX messages on behalf of other companies. Aggregators enable smaller companies to participate in the DDEX ecosystem.

Deal — A Deal is what transforms a Release into a product. A Deal states how a Release may be made available to consumers.

DSP — Digital Service Provider; a company that receives and/or dis-tributes content

FTP — File Transfer Protocol; A protocol to exchange files (e.g. XML files ort Resource files) via the internet.

Product — a collection of resources, combined with a deal that is marketed or sold as a commodity

Profile a subset of a larger standard that defines how to use that standard in a specific way for a specific use case

Release — A collection of one or more Resources that, together, make a tradable collection.

Resource — The individual assets that make up a Release. Typical Re-sources are sound recordings, video clips and cover art images.

Web Service — A modern set of web technologies that allow small pieces of information, typically in the form of XML files, to be ex-changed. Augmented with FTP they can be used to communicate Re-leases along the music supply chain.

XML — eXtensible Markup Language; a set of rules for encoding documents in machine-readable form.