

eCTD: More than a Document

Heather Crandall

Division of Data Management Services and Solutions Office of Business Informatics CDER | US FDA

Regulatory Education for Industry (REdI): Annual Conference – June 5-9, 2023

Learning Objectives



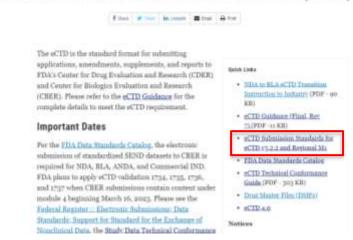
- Understand where to find new information for eCTD submissions
- List the most common errors made when submitting in eCTD format
- Know resources available for common questions asked about eCTD submissions

What's New?



- Submission Standards location
 - New webpage as of December 2022
- Addition of Structure-Data Files information
 - Section 3.3.3 of the Technical Conformance Guide (updated November 2022)

Electronic Common Technical Document (eCTD)



What's New?



- New 1738 error
 - Study ID should match between STF and ts.xpt files
 - Medium level
- 1737 check every m4 and m5 section where an STF is required
 - Does not include 4.3, 5.2, 5.4, and 5.3.6

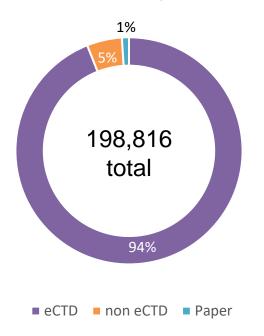
Number:	1738			
Group:	General			
Description:	STF Study ID should match STUDYID or SPREFID listed in the referenced Trial Summary (ts.xpt) file			
Severity Description:	Medium			
US DTD Version	3.3			
Effective Date:	3/16/2023			
Problem:	The STF Study ID does not match the STUDYID or SPREFID listed in the referenced ts.xpt file (not an exact match).			
Corrective Action:	Ensure ts.xpt is referenced under the correct STF. If ts.xpt is under the correct STF, update the STUDYID or SPREFID is the ts.xpt and other referenced study data files. Modify your SOPs to ensure that a consistent Study ID (exact match) is used.			
Guidance Source:	The eCTD Backbone File Specification for Study Tagging Files; Providing Regulatory Submissions in Electronic Format – Standardized Study Data; Study Data Technical Conformance Guide; General good practice to ensure reviewability.			

eCTD Submission Metrics



CDER Submissions October 1, 2022 through April 30, 2023

Percent of Submissions by Electronic Format

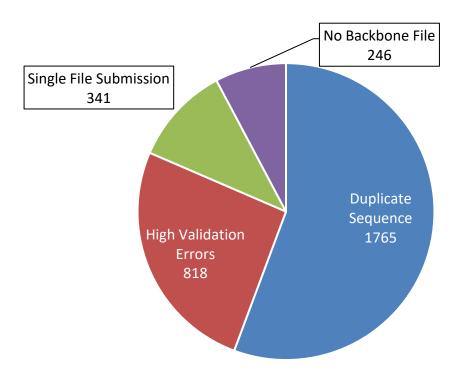


eCTD	94%
non eCTD	5%
PAPER	1%

Top Reasons for eCTD Rejection



Approximately 1% of eCTD submissions are rejected

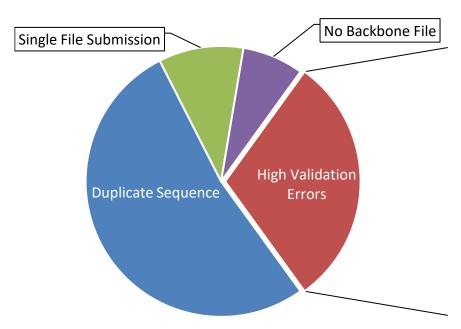


October 1, 2022 through April 30, 2023

Top 10 High Errors

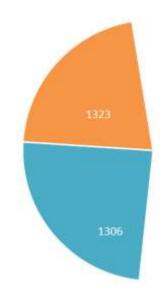


eCTD Submission Errors October 1, 2022 through April 30, 2023



Leaf Element Errors





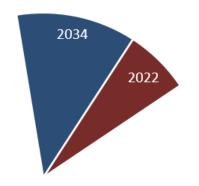
46% of High Errors are:

• Code 1306 – No leaf element for file

• Code 1323 – No file for leaf element

Submission Type Errors





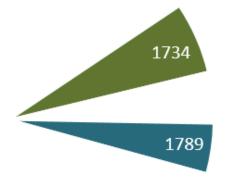
18% of High Errors are:

 Code 2034 – Submission Type invalid for Application Type

 Code 2022 – Submission Sub-Type is invalid for Submission Type

Study Data Errors





10% of High Errors are:

Code 1734 – A dataset named ts.xpt with information on study start date must be present for each study in Module 4, sections 4.2.3.1, 4.2.3.2, 4.2.3.4, and in Module 5, sections 5.3.1.1, 5.3.1.2, 5.3.3.1, 5.3.3.2, 5.3.3.3, 5.3.3.4, 5.3.4, 5.3.5.1, 5.3.5.2

 Code 1789 – A file has been submitted in a study section without providing an STF file. STFs are not required for 4.3 Literature references, 5.2 Tabular listings, 5.4 Literature references and 5.3.6 Postmarketing reports

Challenge Question #1



Most eCTD submission failures are due to:

- A. Duplicate sequence number
- B. eCTD validation error
- C. Missing backbone file
- D. A single file submission

Challenge Question #2



The majority of High Validation Errors are due to:

- A. Missing ts.xpt file
- B. Invalid submission type or sub-type
- C. Leaf elements and files missing each other
- D. Data not referenced in an STF



- Where do I place content?
- How do I cross-reference to another application?
- What file formats are recommended?
- Do I need a digital signature on my 1571/356h?
- What file-tag should I use?



Where do I place content?

Resources:

- ★ The Comprehensive
 Table of Contents
 Headings and Hierarchy
- ✓ M4 Organization of the Common Technical <u>Document for the Registration of</u> <u>Pharmaceuticals for Human Use Guidance foold Industry</u>
- ✓ FDA Regulatory Project Manager
- ✓ esub@fda.hhs.gov

The Comprehensive Table of Contents Headings and Hierarchy

Module 1 Administrative information

1.1 Forms

Form [form-type]

1.2 Cover letters

1.3 Administrative information

1.3.1 Contact/sponsor/applicant information

1.3.1.1 Change of address or corporate name

1.3.1.2 Change in contact/agent

1.3.1.3 Change in sponsor

1.3.1.4 Transfer of obligation

1.3.1.5 Change in ownership of an application or reissuance of license

1.3.2 Field copy certification

1.3.3 Debarment certification

1.3.4 Financial certification and disclosure

1.3.5 Patent and exclusivity

1.3.5.1 Patent information

1.3.5.2 Patent certification

1.3.5.3 Exclusivity claim

1.3.6 Tropical disease priority review voucher

1.4 References

1.4.1 Letter of authorization

1.4.2 Statement of right of reference

1.4.3 List of authorized persons to incorporate by reference



15

How do I cross-reference to another eCTD application?

Resources:

- ✓ eCTD Backbone Files Specification for Module 1
- ✓ esub@fda.hhs.gov

Cross-reference-application-number element

This element should only be provided when an application makes reference to other applications. Cross references are unnecessary when the application(s) being referenced are in the *application-set*.² A cross reference only needs to be identified once.

Provide the six (6)-digit application number in the *cross-reference-application-number* element. Only provide numeric digits, including any leading zeros for the application number, without letters or dashes.

Each cross-reference-application-number element requires an attribute of application-type and the attribute should be provided as a coded value from its corresponding attribute list (application-type.xml). The current valid codes for application-type are available in the eCTD Submission Standards on the FDA website: https://www.fda.gov/ectd.

The following is an example of a *cross-reference-application-number* element. In this example, the application NDA 456789 cross-references DMF 012345. The *cross-reference-application-number* element contains the attribute value of "fdaat5" for the *application-type*, which indicates it is a Drug Master File (DMF).

<a pplication-number a pplication-type="fdaat1">456789</application-number>
<cross-reference-application-number a pplication-type="fdaat5">012345
/cross-reference-application-number>



What file formats are expected?

Resources:

- ✓ <u>Specifications for File Format</u>
 Types
- √ FDA Regulatory Project Manager
- ✓ esub@fda.hhs.gov

Specifications for File Format Types Using eCTD Specifications

File Type	File Format	Format Name	Accepted location in eCTD	Archive Format Copy	Permissible Uses
Documents					
	.pdf	Portable Document Format	M1 – M5		
	100	Microsoft Word document	M1.14, 1.16		
	_doc		M2.3, M2.7	PDF	ANDA
	docx	Microsoft Word Open XML document	MI.14, 1.16		
			M2.3, M2.7	PDF	ANDA
	.txt	Text file	M3 - M5		
	_xls	Microsoft Excel document	M3 – M5	PDF	
	.xlsx	Microsoft Excel Open XML document	M3 – M5	PDF	
Images					
	himin	Bitmap	ML 15		



Do I need a digital signature on my 1571/356h?

Resources:

- ✓ <u>Important Information About</u>
 <u>Digital/Electronic Signatures | FDA</u>
- ✓ <u>esub@fda.hhs.gov</u>

Important Information About Digital/Electronic Signatures



FDA does not require submission of a paper copy for electronic submissions submitted using the FDA ESG.

FDA forms (e.g., 1571, 356h) and documents require a signature. Accepted signature methods by FDA are:

- · Scanned signatures
- Digital signatures
- Flattened digital signatures. A flattened digital signature must include (see example):
 - · the printed name of the signer
 - the date and time when the signature was executed
 - o the reason for signature



What file-tag should I use?

Resources:

- ▼ The eCTD Backbone File
 Specification for Study Tagging
 Files
- ✓ <u>Study Data Technical</u> <u>Conformance Guide v5.0</u>
- ✓ <u>Valid values.xml file</u>
- ✓ esub@fda.hhs.gov

```
craml wersionw'1.0" emoodings"UTF-8"V>
scectd; study-values amine; ectd="http://www.ich.org/ectd" dtd-secsion="2.2">
<!-- valid-values v2.0 - November10, 2016 ->
    «cutegory mater species">
        cvalid-value realm="ich" value="mouse"/>
        coalid-value reales"igh" values"gat"/>
        cvalid-value realm="ich" unlue="hamater"/>
        cvalid-value reals="ich" Value="other-rodest"/>
        evalid-value regin="ich" value="rabbit"/>
        cyalid-value realm="ich" value="dog"/>
        cvalid-value realmerich" uninew"non-human-primate"/>
        evalid-value regime"ich" value="other-non-rodent-nassal"/>
        cvalid-value resime"ich" value="non-manmals"/>
    coategory name="route-of-admin">
        cvalid-value realme"ich" walue-"oral"/>
        cvalid-value realm="ich" walue="intravecous"/>
        cvalid-value realm="ich" value="intramageular"/>
        cvalid-value reals="ish" value="intraperitoneal"/>
        cvalid-value realm="loh" value="subcutaneous"/>
        cvalid-value realme"ich" value="inhalation"/>
        cvalid-value cealmerich" value="topical"/>
        cvalid-value realm="ich" value="other"/>
    <category.name="duration">
        cvalid-value realm="us" value="short"/>
        cvalid-value reals-"us" value-"medium"/>
        <valid-value resim="us" value="long"/>
    </casegory>
    <category name="type-of-control">
        cvalid-value realme"ich" value="placebo"/>
        <valid-value realm="ich" value="no-treatment"/>
        (valid-value reals="inh" value="dose-response-without-placebo"/>
        cvalid-value reals-"ich" value-"active-control-without-placebo"/>
        cyalid-value reals-"ich" value-"external"/>
    cvalid-value resine us" value "gite-identifier"/>
    </property>
    <file-tag>
        cvalid-value resin="ich" value="pre-clinical-study-report"/>
        <valid-value realme"ich" value="legacy-clinical-study-report"/>
        <valid-value realn="ich" value="synopsis"/>
        cvalid-value rwain-"ich" value-"study-report-body"/>
        cyalid-value rwaln-"ich" Value-"protocol-or-amendment"/>
        cvalid-value realm="ich" value="sample-case-report-form"/>
        «valid-value realm="ich" value="iec-izb-consent-form-list"/>
        cvalid-value realms*ich* Values*list-description-investigator-site*/>
        <valid-value realm="ich" value="signatures-investigators"/>
        cvalid-value realmerich" value="list-patients-with-hatches"/>
        cvalid-value realm="ich" value="randomisation-scheme"/>
        <valid-value reals="ich" value="audit-certificates-report"/>
        cvalid-value reals-"ich" value-"statistical-methods-interim-analysis-plan"/>
```

Challenge Question #3



Where can I find recommended file formats?

- A. Comprehensive Table of Contents of Headings and Hierarchies
- B. Specifications for File Format Types Using eCTD Specifications
- C. eCTD Technical Conformance Guide
- D. The eCTD Backbone Files Specification for Module 1

Summary



- Check FDA's eCTD webpage, <u>www.fda.gov/ectd</u> for announcements, updates, and the Specifications
- Most common eCTD submission mistake is using a duplicate sequence number

Resources



- Web page for latest version of eCTD guidance, specifications, and validations
- eCTD Comprehensive Table of Contents Headings and Hierarchy
- M4 Organization of the Common Technical Document for the Registration of Pharmaceuticals for Human Use Guidance for Industry
- eCTD Technical Conformance Guide
- Interdisciplinary Review Team for Cardiac Safety Studies (formerly QT-IRT)
- The eCTD Backbone Files Specification for Module 1
- Specifications for File Format Types
- FDA's eCTD v4 implementation page



Questions?

Heather Crandall

Division of Data Management Services and Solutions
Office of Business Informatics
CDER | US FDA

Have questions after the conference? Please send to esub@fda.hhs.gov

