

#### eCTD Update

21st Annual DIA Conference for Electronic Document Management

Gary M Gensinger, MBA
Director, Regulatory Review Support Staff
Office of Business Process Support
Center for Drug Evaluation and Research
United States Food and Drug Administration



## **Overview**

- Review of guidances
- Numbers please…
- A word on validation
- Back to the future
- The reviewer's desktop



## eCTD Guidance

- Providing Regulatory Submissions in Electronic Format - Human Pharmaceutical Product Applications and Related Submissions
  - All submission types
    - NDA, ANDA, BLA, IND, DMF, Annual Reports, Periodic Safety Reports, Advertising and Promotional Labeling
  - Last Published as Final April 2006
- Preferred Format for Submissions



# eCTD Specifications

- eCTD Specifications
  - FDA Module 1 Specification
  - FDA Modules 2 to 5 Specification
  - Study Tagging File Specification
- FDA eCTD Table of Contents Headings and Hierarchy
- Documentation Available On-Line

http://www.fda.gov/cder/regulatory/ersr/default.htm



## Other Guidances

- Withdrawn traditional eSubmission
  - 1999 Providing Regulatory Submissions in Electronic Format NDAs
  - 2002 Providing Regulatory Submissions in Electronic Format – ANDAs
  - 2003 Providing Regulatory Submissions in Electronic Format – Annual Reports for NDAs and ANDAs (*draft*)
- eCTD is only recognized format without a waiver



#### Be on the lookout for

- Updated Specifications from ICH
  - eCTD Version 3.2.1
  - STF Version 2.2
- FDA Validation Criteria
- Beginning discussions on updating Module 1



# FDA eCTD Metrics 2006 DIA Annual Meeting

	Applications	Submissions
DMF	14	17
IND	119	1,312
NDA	71	1,194
ANDA	72	236
BLA	18	599
Total	285	3,358



# FDA eCTD Metrics 2007 DIA EDM

	Applications	Submissions
IND	239	3,488
NDA	153	2,203
ANDA	117	472
BLA	34	1,070
DMF	46	56
FDA Internal	3	3
Totals	596	7,292



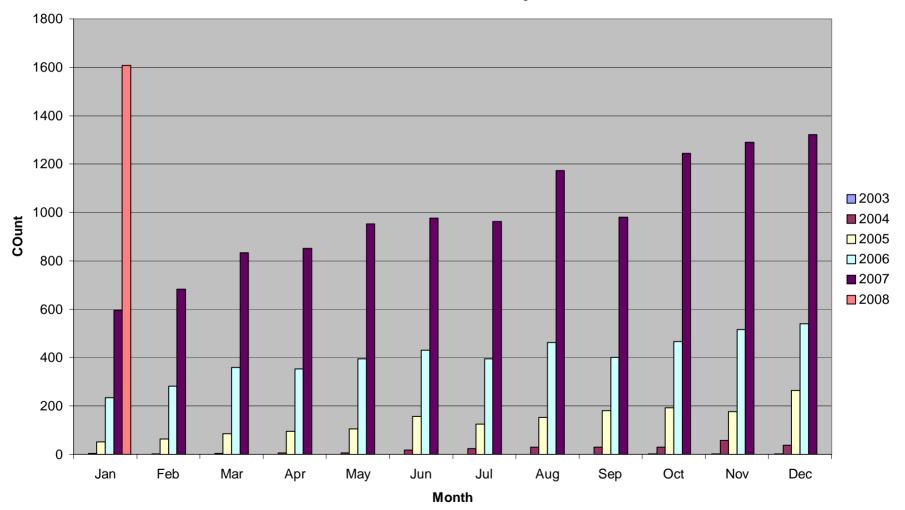
# FDA eCTD Metrics 2008 DIA EDM

Application	Count	Submissions
IND	644	10,955
NDA	531	5,184
ANDA	617	1,853
BLA	60	2,221
DMF	135	188
FDA Internal	191	373
Total	2,182	20,773



#### eCTD Submissions

October 2003 - January 2008





## eSubmissions – The Larger Perspective

- For 2007
  - Total Submissions 167,490
  - Paper 136,556 (81%)
  - Mixed Paper/Electronic14,025 (8%)
  - Electronic Only 16909 (11%)



## **A Great Start**

Туре	Total	Paper		Mixed		Electronic	
NDA Original Initial	124	15	12.10%	70	56.45%	39	31.45%
NDA Original Amendment	13690	9595	70.09%	534	3.90%	3561	26.01%
NDA Efficacy Supplements Initial	159	17	10.69%	62	38.99%	80	50.31%
NDA Efficacy Supplements Amendment	2666	1513	56.75%	127	4.76%	1026	38.48%
NDA Manufacturing Supplements Initial	1987	1211	60.95%	120	6.04%	656	33.01%
NDA Manufacturing Supplements Amendment	1551	1117	72.02%	54	3.48%	380	24.50%
NDA Labeling Supplements Initial	976	84	8.61%	192	19.67%	700	71.72%
NDA Labeling Supplements Amendment	2115	957	45.25%	195	9.22%	963	45.53%
NDA Other Amendment	6903	4187	60.65%	2536	36.74%	180	2.61%



# **Progress is Still Needed**

Туре	Total	Paper	Percentage	Mixed	Percentage	Electronic	Percentage
IND Original	3241	3039	93.77%	82	2.53%	120	3.70%
IND Amendment	84929	77207	90.91%	713	0.84%	7009	8.25%

<sup>\*</sup> Numbers reported are draft



# Paper Remains an Issue





## eCTD Validation Criteria

- Harmonized between CDER and CBER
- Developing documentation to ensure validation is clear and responses to error documented
- To be published shortly



# eCTD Validation Example

Error	Missing file
Severity	Medium
Description	You have referenced a file in the hlink:xref attribute of a leaf and the system is unable to locate the file. It may be missing or you may have mis-spelled the file's name
To Repair	Submit the missing file or correct its name in a later sequence referencing the original leaf using the operation attrribute of "replace"



## The FDA's Goal

Implement a standards-based end-to-end fully electronic receipt, review, and dissemination environment



## **Exchange Standards Organizations**

- Development and adoption coordinated with other health-related organizations
  - Accredited, open consensus SDO
    - International Standards Organization (ISO)
    - American National Standards Institute (ANSI)
    - Health Level Seven (HL7)
    - National Council for Prescription Drug Programs (NCPDP)
  - US standards adoption initiatives
    - Consolidate Health Informatics (CHI)
    - Health Information Technology Standards Panel (HITSP)
  - Others
    - Clinical Data Interchange Standards Consortium (CDISC)
    - Global regulatory standards groups (ICH, VICH, GHTF)



## **HL7 Exchange Standards**

- Submission Information
  - Regulated Product Submission Standard
- Product Labeling and Listing Information
  - Structured Product Labeling
- Manufacturing Information
  - Stability Data Standard
- Study Information
  - CDISC HL7 Standards
- Adverse Reaction Reports
  - Individual Case Safety Report Forms
- ECG Information
  - Annotated ECG Waveform Data standard



## What Will Standards Mean to Industry?

- Improved harmony across Divisions and Centers
  - Focus is FDA-Wide
- Higher quality submission specifications
  - Formal standards development organizations (SDO), e.g., HL7, ANSI, CEN, have rigorous procedures to ensure the development of quality standards
- Increased ability to influence standards
  - SDOs employ an open process



# **Enhance FDA Operations**

- Increase use of FDA Electronic Submission Gateway
- Leverage metadata accompanying eSubmissions
  - Automate receipt functions
  - Automate validation
  - Automate notification and routing



# **Enhance Review Capabilities**

- Submission Content
  - Janus Study Data Warehouse
  - Integrated Electronic Document Room
- Review Tools
  - WebSDM
  - Patient Profile Viewer
  - iReview/jReview
  - ToxVision
  - GSReview



# **Enhance Review Capabilities**

...Continued

- Improve Decision Support Tools
  - Data Mining
- Standardized Review Templates
  - SMART Template
- Supportive Documentation
  - Electronic Archive of FDA Documentation
  - Enhanced Search Tools
- Review Management Tools
  - Performance Tracking and Analysis
  - Reporting
  - Automated Workflow



## **Enhance Information Exchange**

- Capture Investigator Information
  - Firebird
- Two-Way Communications
  - Use FDA ESG to provide two-way communication
  - SPL Collaboration Portal



# The Reviewers Desktop



## **The Previous Situation**





Tracking System



EDR (External)

EDR (Internal)



My Inbox | Check in Communication | Create Application | Reports | Search DARRTS Home > View Application > Application History > Appl. Type/Number: IND-992265 Drug Name: Wonder Drug xyz Sponsoi Subm. Type/Number: ANRPT-17 Current Status/Date: CREATED-10/19/20 Supp Doc Number: 542 Submit Date: 10/18/2007 FDA Received Date: View Supporting Document Edit Received Document Set )( Edit Assignments )( Remove Received Document Set )( Unit UNIVERSAL Submit Date 10-18-2007 EDR --- You can find this document in the EDR. Clic **FDA Received Date** 10-19-2007 Delivery Method Gateway Document Properties Value Type No Items Found Document Categories/Subcategories Category Subcategory Original Annual Report



**Linked Communications to this Supporting Document** 

Primary Author	Function	Checkin Date	State	Final Date	Sent Via	Archive
KIE <mark>NNA, LESLIE A</mark>	REV-CLINPHARM-02(Review Noted (NAI))	11/02/2007	Final	11/02/2007	N/A	View
LEE, JONG-HOON	REV-CLINICAL-04(Review Noted (NAI))	01/10/2008	Final	01/10/2008	N/A	View



## References

Electronic Regulatory Submissions and Review website

http://www.fda.gov/cder/regulatory/ersr/default.htm

- CDER Contact for information on SDTM submissions cder-edata@fda.hhs.gov
- Electronic Regulatory Submissions and Review website

http://www.fda.gov/cder/regulatory/ersr/default.htm

 International Conference on Harmonization http://www.ich.org



## References

- SPL Information
  - www.fda.gov/oc/datacouncil/spl.html
- SPL Contact for information on SDTM submissions spl@fda.hhs.gov
- DailyMed

- dailymed.nlm.nih.gov
- SDTM and SEND Information
  - www.cdisc.org