Common Technical Document
(CTD-eCTD)

Aziz DIOP

IT Expert

Overview

- Introduction
- ICH
- CTD
- eCTD
- eCTD Implementation
- SFDA Plan and Prospective for submission
- Sources

Introduction

- There is a joint initiative involving both regulators and research-based industry representatives of the European Union, Japan and the USA in scientific and technical discussions of the testing procedures required to assess and ensure the safety, quality and efficacy of medicines.

- The objective is to **increase international harmonisation** of technical requirements to ensure that safe, effective, and high quality medicines are developed and registered in the most efficient and cost-effective manner.

- Activities have been undertaken to promote public health, prevent unnecessary duplication.

What is ICH ?

- The complete name of ICH is the "**International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use**".

- The purpose is to make recommendations on ways to achieve greater harmonisation in the interpretation and application of technical guidelines and requirements for product registration in order to reduce or prevent the need to duplicate the testing carried out during the research and development of new medicines.

- This unique project brings together the participants in the three regions to discuss scientific and technical aspects of product registration.

Structure of ICH (1/2)

- ICH is a joint initiative involving both regulators and industry as equal partners in the scientific and technical discussions of the testing procedures which are required to ensure and assess the safety, quality and efficacy of medicines.

- The focus of ICH has been on the technical requirements for medicinal products containing new drugs. The vast majority of those new drugs and medicines are developed in Western Europe, Japan and the United States of America and therefore, when ICH was established, it was agreed that its scope would be confined to registration in those three regions.

Structure of ICH (2/2)

- ICH is comprised of Six Parties that are directly involved, as well as three Observers and IFPMA. The Six Parties are the founder members of ICH which represent the regulatory bodies and the research-based industry in the European Union, Japan and the USA. These parties include the EU, EFPIA, MHLW, JPMA, FDA and PhRMA.

- The Observers are WHO, EFTA (Currently represented at ICH by Swissmedic Switzerland), and Canada (represented by Health Canada). This important group of non-voting members acts as a link between the ICH and non-ICH countries and regions.

CTD (1/2)

- The CTD was agreed upon in November 2000, in San Diego, USA.

- The purpose of this **C**ommon **T**echnical **D**ocument (**CTD**) is to provide a harmonised structure and format for new product applications (marketing authorization).

- The use of the CTD format is **mandatory** as from 1 July 2003 in the European Union.

- The ICH Steering Committee adopted a new codification system for ICH Guidelines (Nov 2005)

- The purpose of this new codification is to ensure that the numbering system of ICH Guidelines is more logical, consistent and clearer.

CTD (2/2)

- The focus of the CTD is to provide a common format for the preparation of a well structured submission according to the modular framework described in the ICH guidelines of *the Common Technical Document for Registration for Human Use* (ICH Topic M4).

- The CTD guidance indicates **where** and **how** available information is to be presented.

- The CTD is **not intended** to indicate **what studies** are actually required (Authorities can ask for specific types of data).

CTD : What is it ?

- **It is:**

  A common harmonised format for applications for preparing marketing authorisations in the three ICH regions.

  A Template for preparing data in the dossier.

- **It is not :**

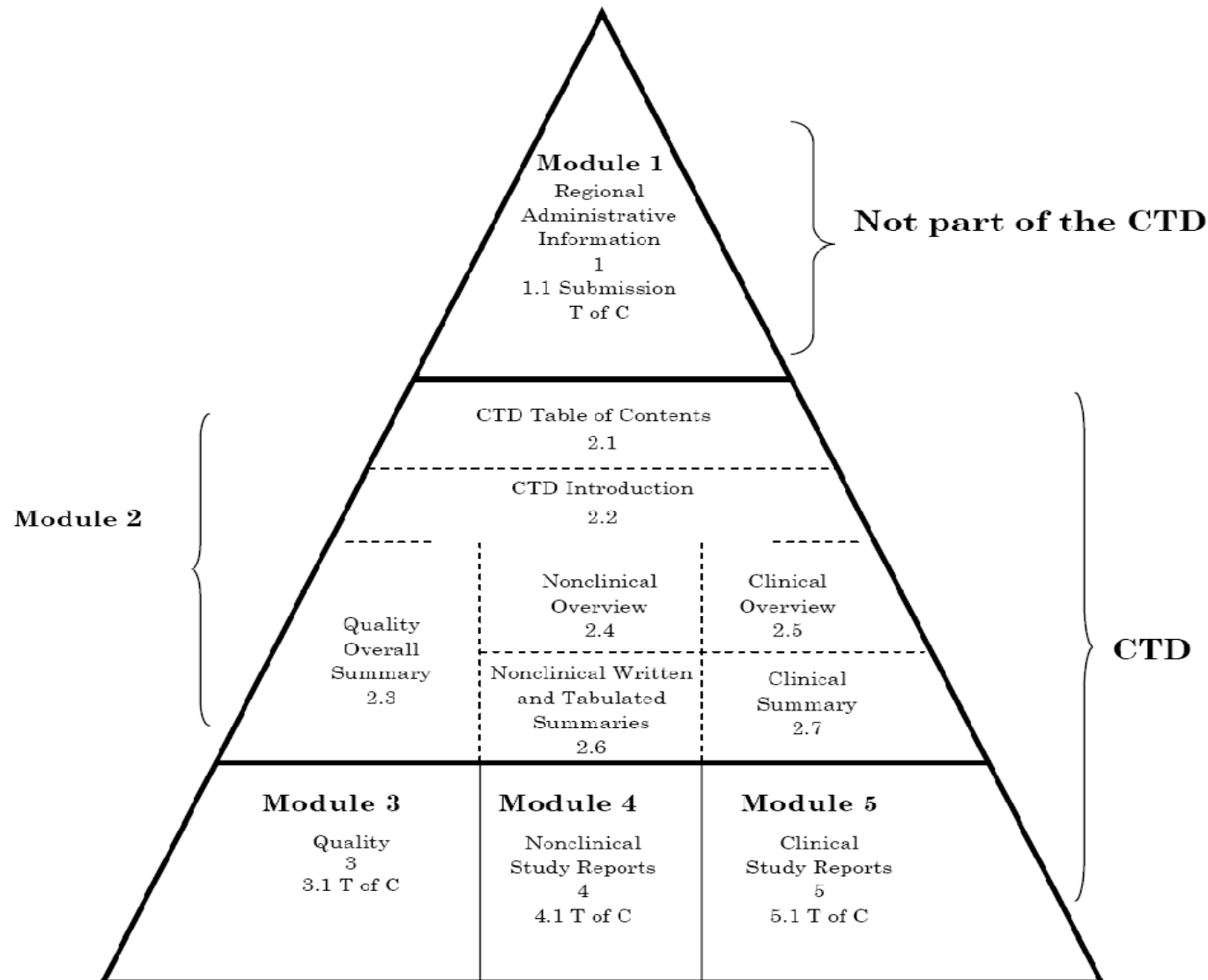 A statement of data requirements for applications.

- **How is it structured ?**

CTD Structure

The CTD is organized into **FIVE** modules:

- **Module 1**: Regional Administrative Information.

- **Module 2**: Introduction, Quality Overall Summary, Nonclinical Overview, Clinical Overview, Nonclinical Written and Tabulated Summaries, Clinical Summary

- **Module 3**: Quality

- **Module 4**: Nonclinical Study Reports

- **Module 5**: Clinical Study Reports

Diagrammatic Representation of the organisation of the ICH CTD

Module 1
Regional Administrative Information 1
1.1 Submission T of C

Not part of the CTD

CTD Table of Contents 2.1

CTD Introduction 2.2

Module 2

Quality Overall Summary 2.3

Nonclinical Overview 2.4

Clinical Overview 2.5

Nonclinical Written and Tabulated Summaries 2.6

Clinical Summary 2.7

CTD

Module 3
Quality 3
3.1 T of C

Module 4
Nonclinical Study Reports 4
4.1 T of C

Module 5
Clinical Study Reports 5
5.1 T of C

eCTD

- The eCTD is the electronic equivalent to the CTD.

- Why electronic?
  - Improve the submission and review process
  - Increase accuracy of the submission
  - Decrease total costs

- This specification has been developed by the ICH M2 Expert Working group and maintained by the eCTD Implementation Working group in accordance with the ICH Process.
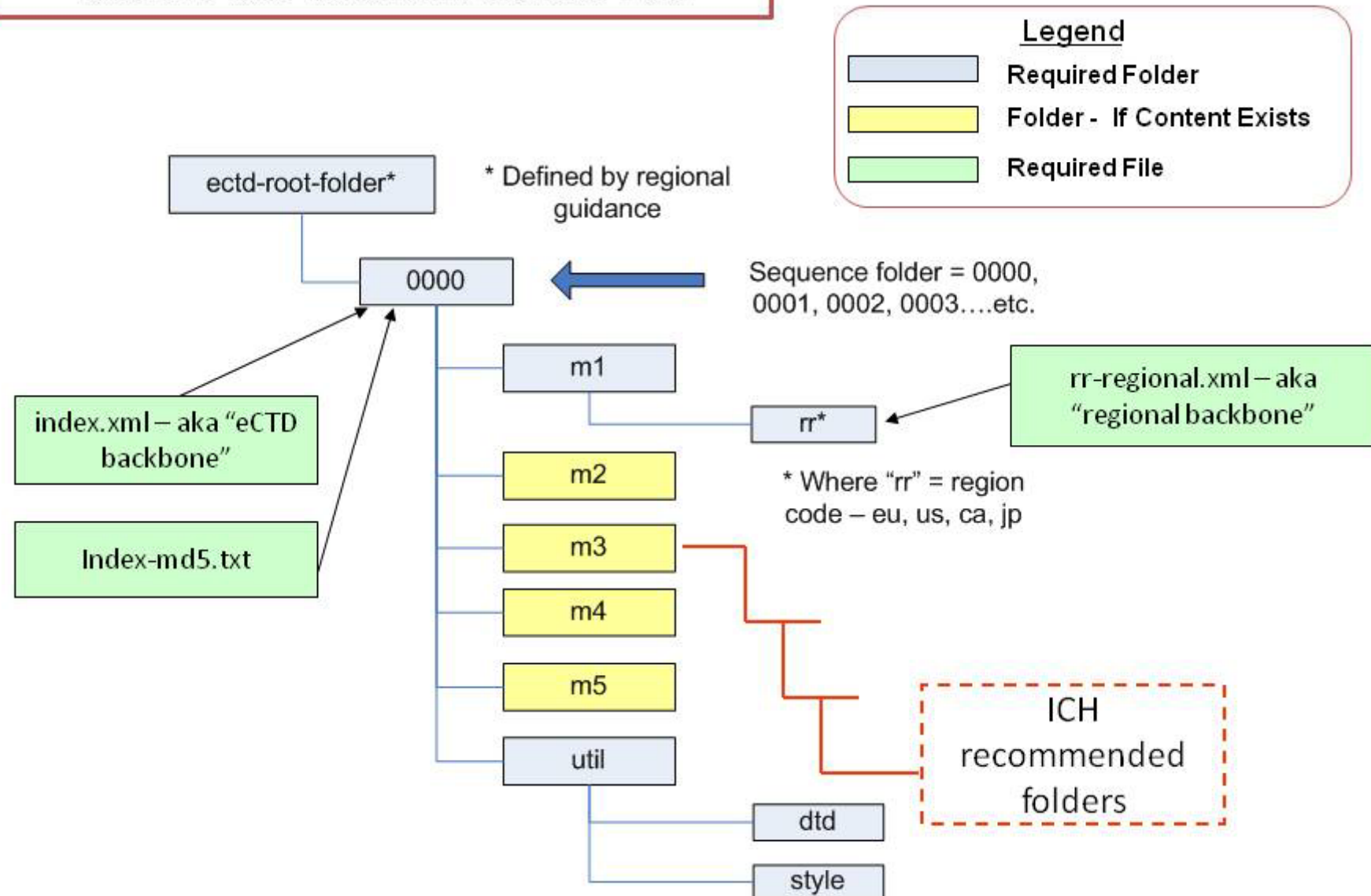
eCTD Changes

- XML based eCTD backbone replaces PDF Tables of Content (index xml file). The purpose of this file is two-fold:
    - Manage meta-data for the entire submission
    - Constitute a comprehensive table of contents and provide corresponding navigation aid

- Increase document granularity in accordance with ICH eCTD agreements.

- Life Cycle Management:
    - Composed at least of an initial submission
    - Incremental updates
    - Only what was changed needs to be re-submitted.

eCTD Specification v 3.2

- eCTD is a message specification for the transfer of files and metadata from industry to regulatory.

- The eCTD Specification version 3.2 describes many optional folders and file names.

- What is the minimum set of required folders and files for a technically acceptable eCTD?

ICH eCTD V3.2 Minimum Folders & Files

Legend
- Required Folder
- Folder - If Content Exists
- Required File

ectd-root-folder*

* Defined by regional guidance

0000

Sequence folder = 0000, 0001, 0002, 0003….etc.

index.xml – aka "eCTD backbone"

Index-md5.txt

m1

rr*

rr-regional.xml – aka "regional backbone"

* Where "rr" = region code – eu, us, ca, jp

m2

m3

m4

m5

util

dtd

style

ICH recommended folders

eCTD Implementation

- ICH-eCTD is an internationally driven standard designed to reduce cost in the administration, assessment and archiving of applications for marketing authorisation of medicinal products for human use, to reduce the use of paper and streamline the assessment process making the system more efficient.

- Unlike CTD the eCTD is not mandatory in Europe (highly recommended).

- NCAs are progressively adapting their infrastructure, processes and legislation to be able to receive and handle paperless applications for marketing authorisation by 2009.

Benefits of eCTD

- Improved handling and archiving of submissions
- Better information management
- Support of **L**ife **C**ycle **M**anagement
- Immediate Access to complete and up-to-date information
- Search functionality for assessors and increased tracking ability
- Facilitated evaluation and better visibility of the process
- Reduced workload and reuse of information for assessment reports
- Controlled communication with external experts
- Better use of resources
- Simplified business process
- Better communication with industry

SFDA Plan for Submission

- Application form should be submitted online

- SFDA will require the product file in both **CTD** (Hardcopy) and **eCTD** (Softcopy) format

- Product file registration should follow the current requirements, but in CTD format

SFDA Prospective for Submission

- Learning process

- Step by step implementation

- Review of the business process

- Build a workflow system

- Pilot phase

- Smooth transition

SOURCES

CTD : Regulatory sources

- Notice to Applicants, Eudralex Vol. 2B : Structure is defined here
  - http://ec.europa.eu/enterprise/pharmaceuticals/eudralex/vol-2/b/ctd_06-2006.pdf

- FDA
  - Http://www.fda.gov/cder/regulatory/ersr/ectd.htm

- Q&A
  - http://www.ich.org/LOB/media/MEDIA620.pdf

- ICH Updates
  - http://www.ich.org

eCTD : Technical sources

- Datafarm

- eCTD office

- Extedo

- GlobalSummit

- IBM

- ISI

- Liquent

- Lorenz

Thank you for your attention