



European Federation of Pharmaceutical  
Industries and Associations



# EFPIA Practical Experience & Proposal for eCTD Implementation

Workshop Perspectivas Regulatórias: e-CTD  
ANVISA, Interfarma and Sindusfarma



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# EFPIA Presenters

## Rodrigo Palacios

- Global Regulatory Policy Lead for Digital Infrastructure in F. Hoffmann-La Roche, Basel, Switzerland
- Representing Roche in several working groups in EFPIA (EU) and PhRMA (US)
- 18 years of experience in Life Sciences, 12 years in Regulatory Affairs
- Master of Business Administration (MBA) UC Berkeley 2009; Bachelor in Computer Science, ITESM, México



# Agenda

\*eCTD Background

\*eCTD Adoption

\*eCTD Advantages for Regulators

\* Summary Recommendations

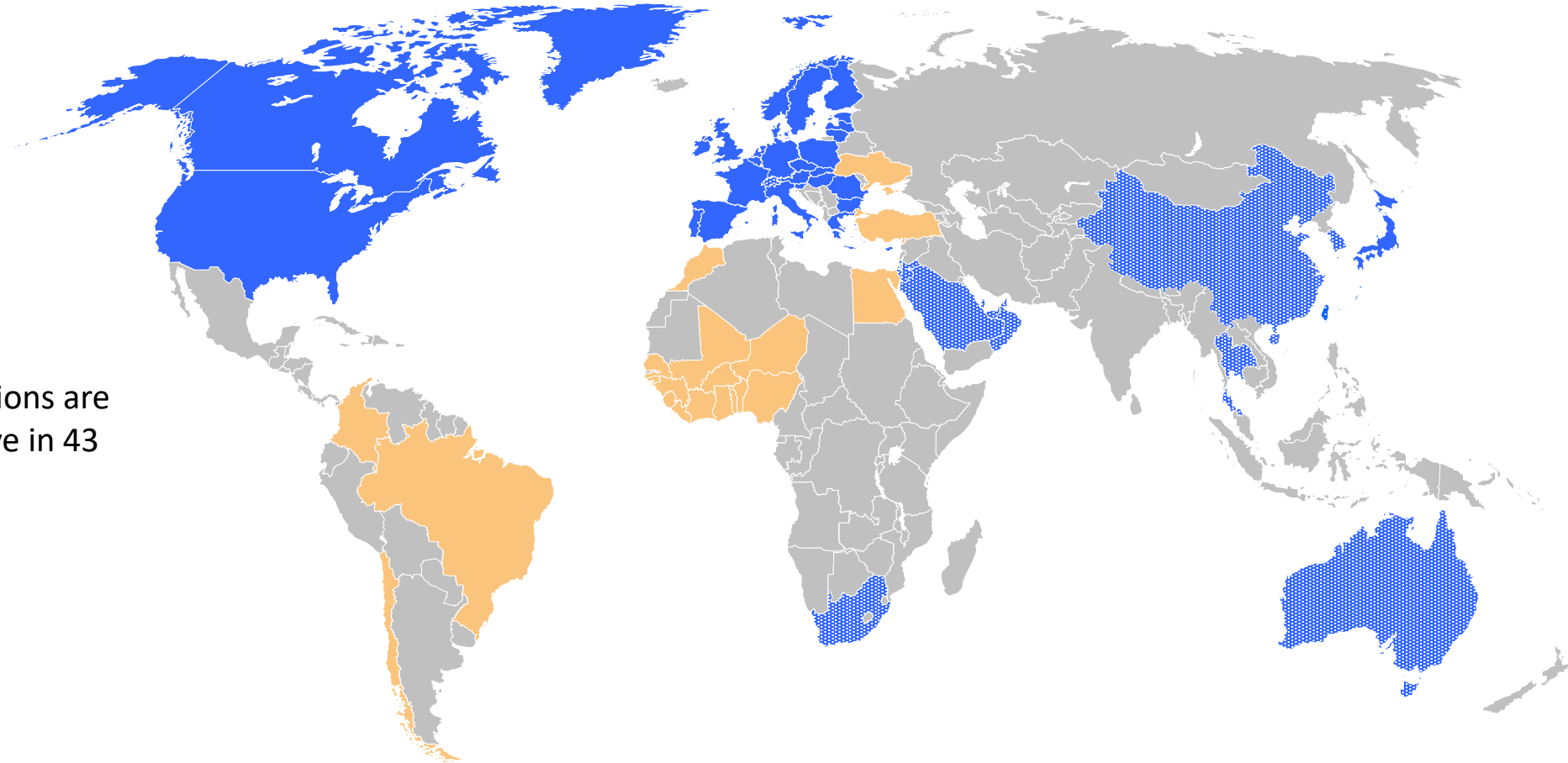


## BACKGROUND TO eCTD

# Visual of Global ICH eCTD Adoption 2022



eCTD submissions are currently active in 43 countries



Early eCTD adopters (Main ICH region) – Canada, Europe (Centralised Procedure), Japan, USA



More recent eCTD adoption – Australia, Bahrain, China, Europe (National Procedure), Great Britain, Japan, Jordan, Oman, Qatar, Saudi Arabia, South Africa, Switzerland, Chinese Taipei (Taiwan), Thailand, United Arab Emirates



eCTD planned – Brazil, Chile, Colombia, ECOWAS, Egypt, Morocco, Singapore, South Korea, Ukraine

## BACKGROUND TO eCTD

# Electronic Common Technical Document (eCTD) Dossier Format

An eCTD is an electronic submission of (mostly) PDF leaf documents, stored in the eCTD directory structure, accessed through the XML backbone (index.xml) and with the files' integrity guaranteed by Checksum.

Highly organized electronic table of contents.

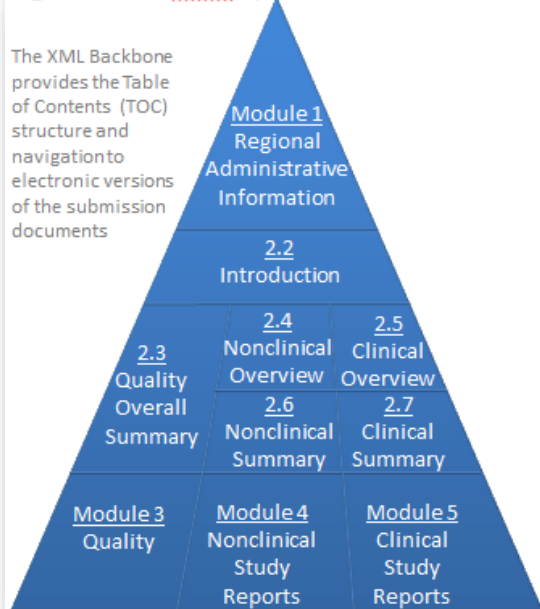
Integrated document and lifecycle management

ICH standard for regulatory submissions

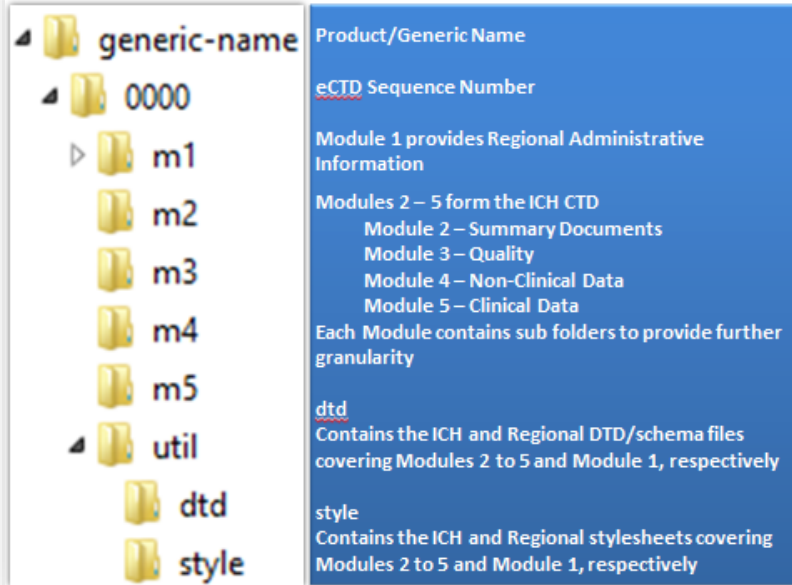
Mandatory for several agencies e.g. FDA and EMA

**Figure 1: The eCTD Pyramid**

The XML Backbone provides the Table of Contents (TOC) structure and navigation to electronic versions of the submission documents

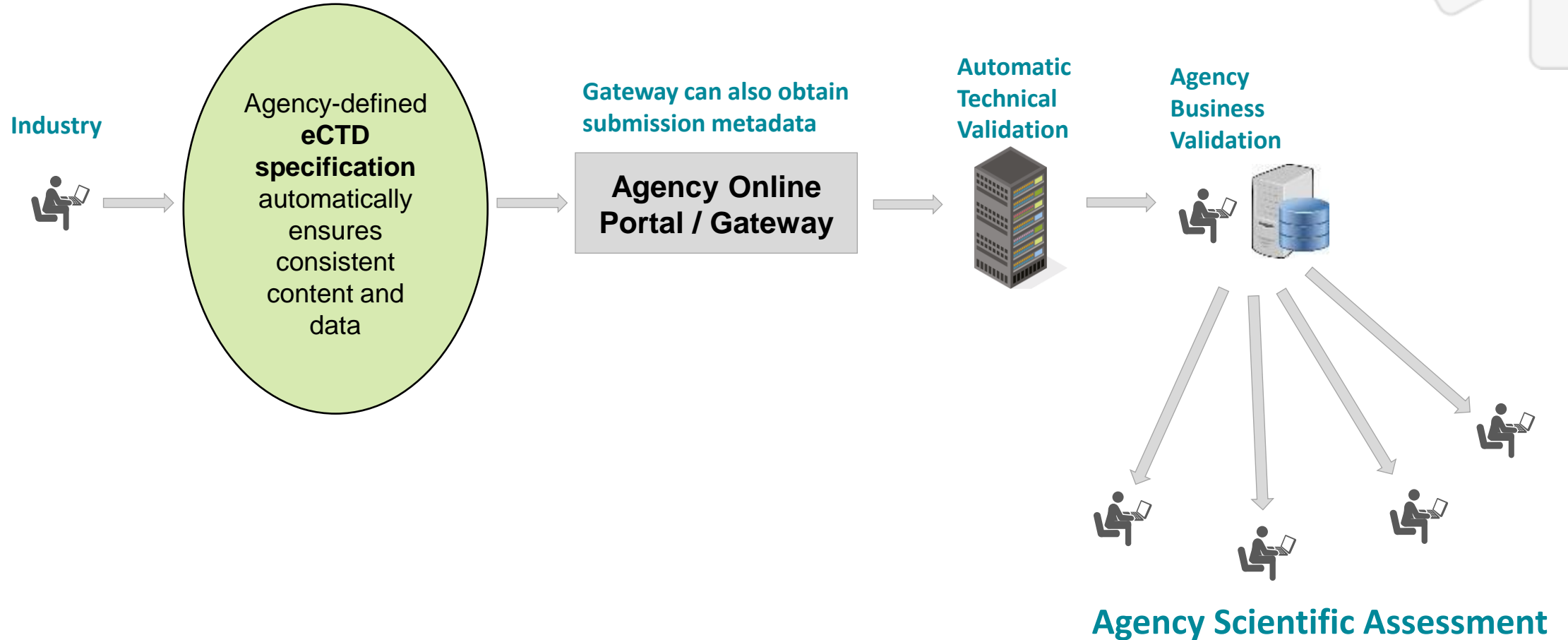


**Figure 2: The eCTD Structure**



## BACKGROUND TO eCTD

# Automated eCTD Submission Workflow



# BACKGROUND TO eCTD

## ICH eCTD Basics

- 0000
- m1
- m2
  - 22-intro
  - 23-qos
  - 24-nonclin-over
  - 25-clin-over
  - 26-nonclin-sum
  - 27-clin-sum
- m3
- m4
- m5
- util

Name  
introduction.pdf

Industry



Health Authority

original

Product 2 - eCTD

response

- 0000
- 0001
- 0002
- 0003
- 0004
- 0005
- 0006

Same content in both

Applicant 1

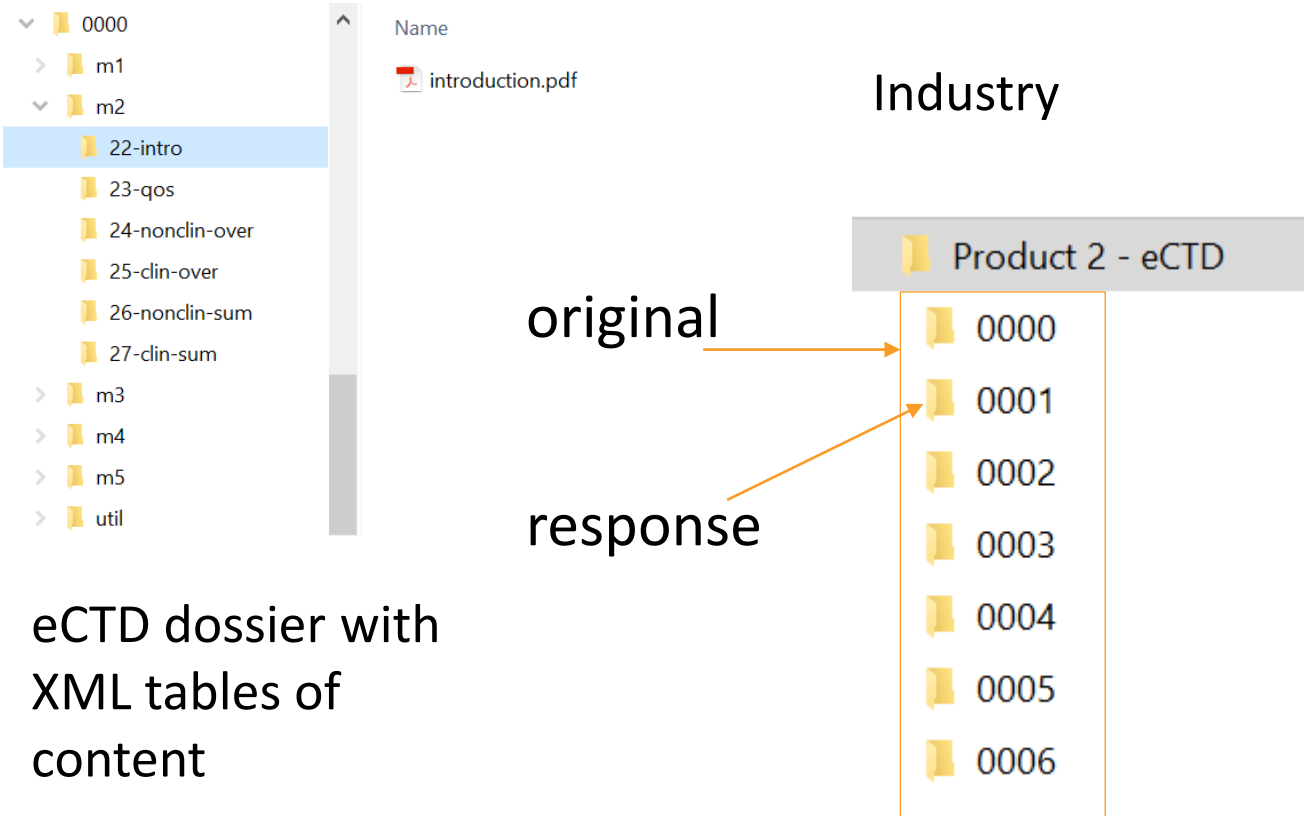
Product 2 Licence xxx

- 0000
- 0001
- 0002
- 0003
- 0004
- 0005
- 0006

eCTD dossier with XML tables of content

## BACKGROUND TO eCTD

### ICH eCTD Basics



eCTD dossier with XML tables of content

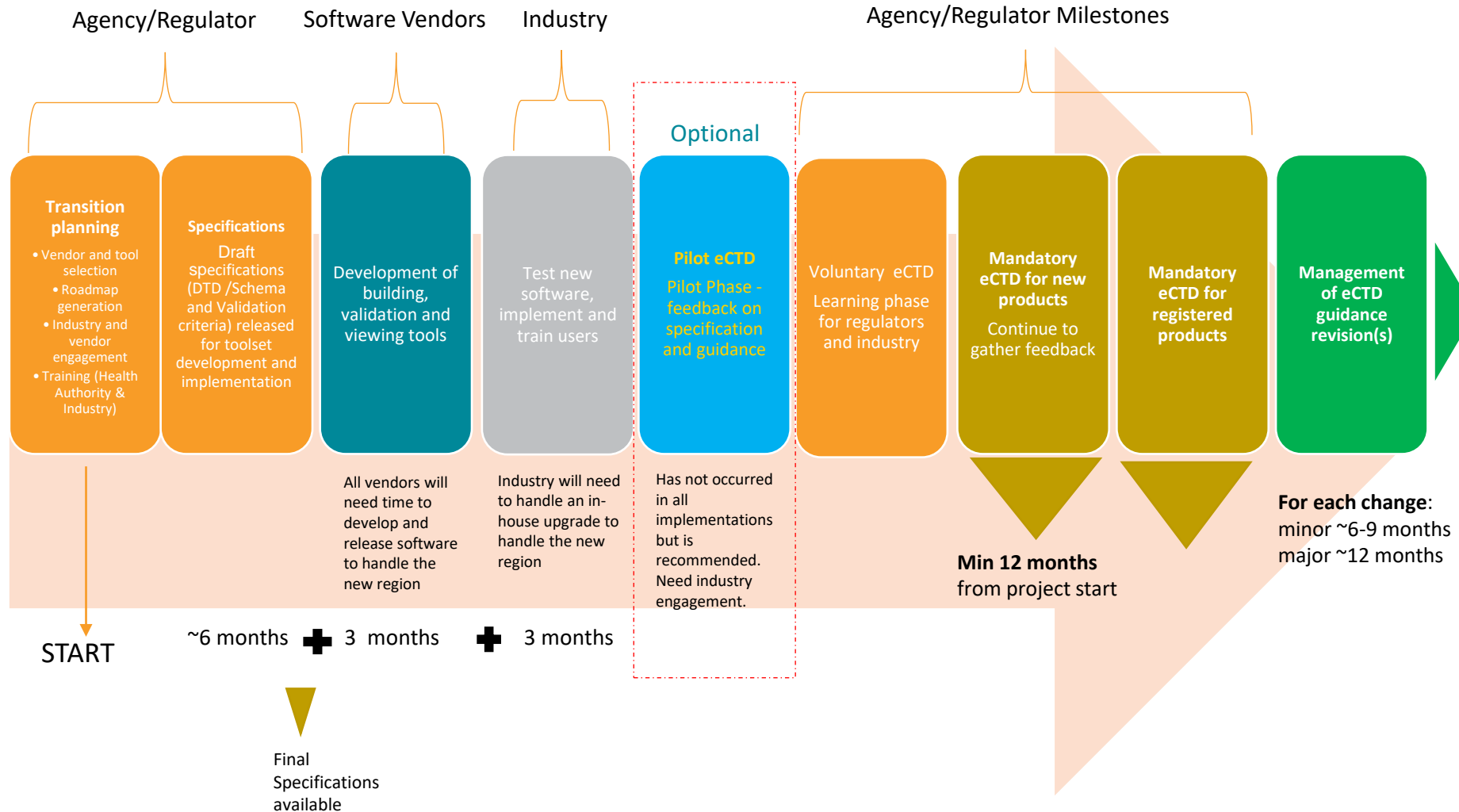
### 3 Views of each Application:

- 1) **SEQUENCE:** Displays the documents from a single sequence
- 2) **CURRENT:** Displays documents from all previous sequences (i.e. combined content from 0000-0006) that has not yet been replaced or deleted
- 3) **CUMULATIVE:** Displays documents from all previous sequences including documents that were deleted or replaced in a later sequence



# ECTD ADOPTION

## Suggested EFPIA eCTD adoption timelines



# eCTD transition planning – Vendor and tool

- \* Health Authority and Applicants use vendor supplied technologies (tools) to ① Build ② Validate ③ View & Review eCTD submissions
- \* Common standards and criteria for ① ② ③ = success
  - \* Validation tools differ, all aim to follow identical criteria per market – ensures same validation results
  - \* When interpretation differs between vendors, there needs to be a mechanism to work with the agencies
- \* As with Validation tools, Health Authority and Applicants do not always buy the same vendor viewing/reviewing tool
  - \* eCTD vendors provide different ways to provide the same standard views:
    - \* **Individual Sequence** (only view the sequence submitted);
    - \* **Cumulative** (a view of all the application lifecycle in its entirety, including content since replaced);
    - \* **Current View** (a view of all the latest, current documents of the application)

### Critical success factors

- \* Timelines (consider sufficient time for each stage of the adoption)
- \* Roadmap (carefully planned and aligned with industry)
- \* Alignment and learning from other health authorities
- \* Gateway and eCTD logistics – ideally electronic transfer from applicant to regulator
- \* Vendor engagement
- \* Partnership between regulators and industry leveraging experience:
  - \* Advice, testing, pilots and discussion
  - \* Example - EU wide collaboration between agencies and industry on eCTD & e-submission topics; supported development of the roadmap, gateways and automated dossier handling and validation criteria



# Advantages of eCTD for Regulators

- \* Key foundation for digital transformation
  - \* Reduces manual paper handling burden and environmental waste
  - \* Automate information receipt and validation
  - \* Enables a decentralized agency review where assessors can be physically based anywhere
- \* Enables collaboration between assessors, between assessors and inspectors, and collaboration across regulators
- \* Aligns agency with ICH standards to facilitate future membership
  - \* Leverages standard specifications from ICH and is foundational to implement further innovative standards (e.g. ISO IDMP)
- \* Immediate access to current and historical application information
- \* Streamline assessment by facilitating navigation through the dossier and across other products
  - \* More granularity of changes can lead to faster reviews and approvals
- \* Immediate availability of dossier for inspections



# Summary EFPIA Recommendations

## \* EFPIA fully supports the adoption of ICH eCTD and recognises the many benefits, including:

- \* Better information management, document storage, retrieval, archiving
- \* Electronic working, searching, cross referencing
- \* Management of product information in the dossier over time
- \* Streamlined agency review process
- \* Tools are available to match the needs of all manufacturers (generics, innovative, local, global)

## \* EFPIA recommendations in these slides:

- \* **Collaboration** – regulator <> industry <> software vendors
- \* **Timelines** – allow time for transition (minimum 12 months)
- \* **Consistency** with existing standards
- \* Baselines recommended only
- \* To achieve full convergence it is recommended that national requirements be kept to a minimum
- \* Implement eCTD incrementally as part of wider E2E process digitization
- \* Maximise use of technology – electronic gateways, use of metadata in other systems

## Further Reading

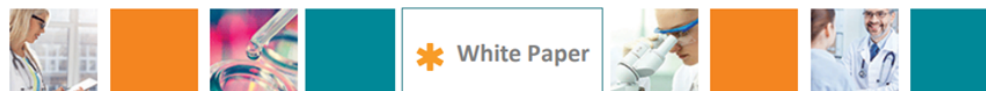
### Global ICH eCTD Adoption White Paper finalised and published on EFPIA Website

#### \* English Version:

[https://www.efpia.eu/media/636610/ectd-white-paper\\_final-20-dec-21.pdf](https://www.efpia.eu/media/636610/ectd-white-paper_final-20-dec-21.pdf)



#### Global ICH eCTD Adoption



Author: EFPIA ● Date: 20/12/2021 ● Version: Final

#### 1 Executive Summary

Over the past decade, industry, technology solution vendors, and regulators have made tremendous advances in the evolution of the submission, review and approval process of regulatory data for medicinal products. Thanks to dossier content and format harmonization efforts by the International Council for Harmonization (ICH) and advances in technological innovation, it became possible to

**efpia**