



### General aspects

Session: Going digital (7 May 2013, 11:15–12:45)

Presented by: Klaus Menges (BfArM), Olivier Simoen (EMA)

Version 01.01



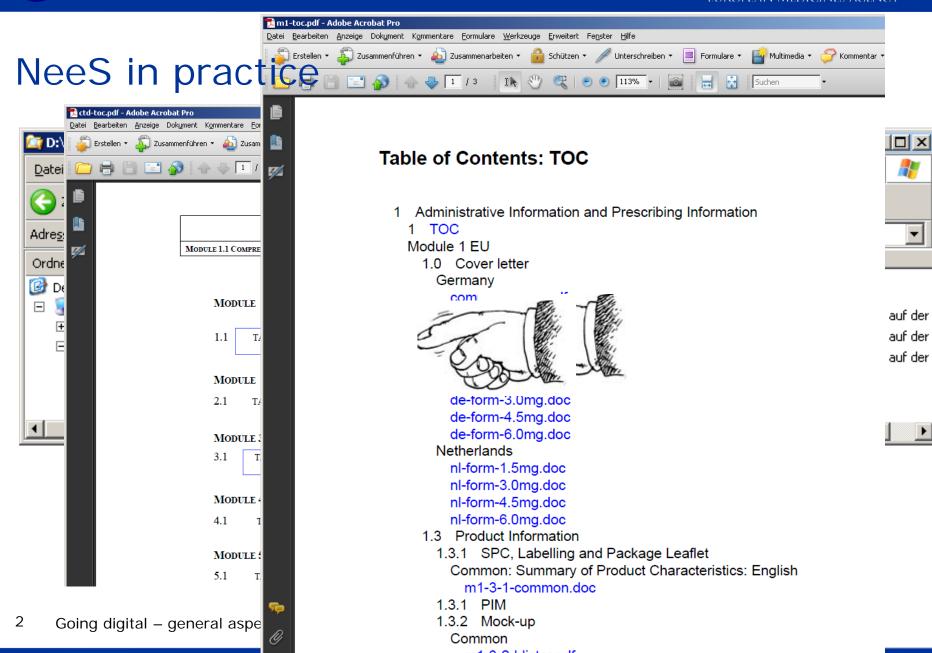
EU 28: science, medicines, health A regulatory system fit for the future

6-7 May 2013, Dubrovnik, Croatia



#### Overview

- eCTD and NeeS
- Technical validation
- eCTD CMDh best practice guide
- Process from submission to publication





### eCTD in practice



#### eCTD DTD

- ml-admi
  - Et
- m2-com
  - m<sup>2</sup>
  - m.

#### EU Module 1 DTD version 1.4

ním, MIROP 4 mg tablety s predĺženým uvoľňovaním, MIROP 8 mg tablety s predĺženým

Envelope for SK Submission: Type: Initial Marketing Authorisation

Number: SK/H/0120/001-002-003

Tracking Number(s): to be advised KRKA Applicant:

Agency: Slovak Rep - State Institute for Drug Control (SK-SIDC)

Procedure:

MIR Invented Name: uvoľi

INN: ROP Sequence: 0005

Related Sequence:

SK/I Submission Description:

Envelope for IT

Submission: Type: Initial Marketing Authorisation

Number: SK/H/0120/001-002-003

Tracking Number(s): to be advised Applicant: KRKA

Agency: Italy - Agenzia Italiana del Farmaco (IT-AIFA)

Procedure: Decentralised Procedure (DCP) Invented Name: MIROP, MIROP, MIROP

INN: ROPINIROLE HYDROCHLORIDE

Sequence: 0005

Related Sequence:

Submission Description: SK/H/0120/001-002-003 - integrated dossier

Envelope for NO

Submission: Type: Initial Marketing Authorisation

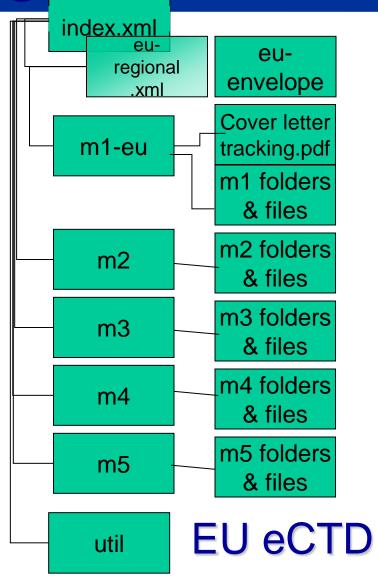
Number: SK/H/0120/001-002-003

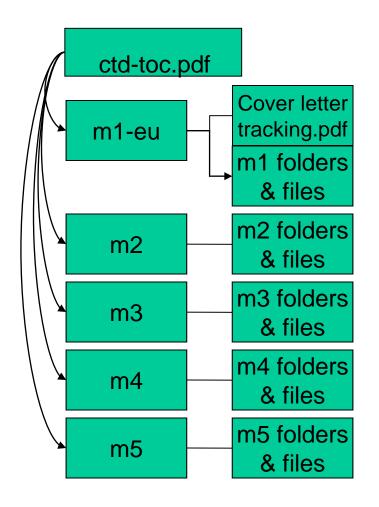
- Stability Substance 1, Manufacturer 1 [new]
- m2-3-s-drug-substance [manufacturer: Manufacturer 2] [substance: Substance 2]
  - General Information Substance 2, Manufacturer 2 [new]

36 0 . 01 . 036 0 . 05 1

## **RfArM**







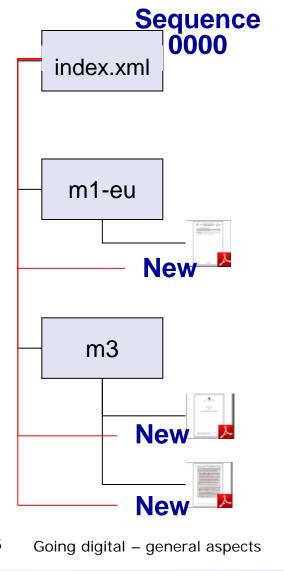
**EU NeeS** 

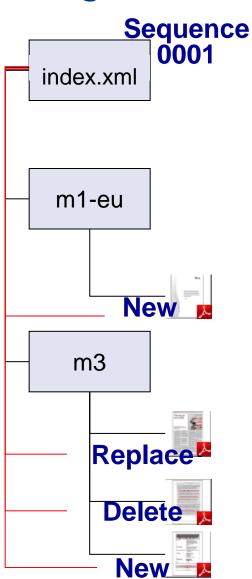
outside eCTD working documents Word files

"outside" NeeS working documents Word files

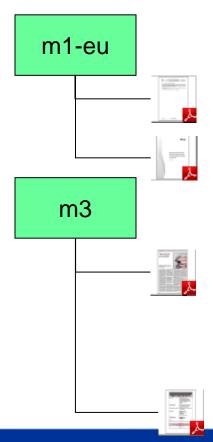


### eCTD lifecycle management



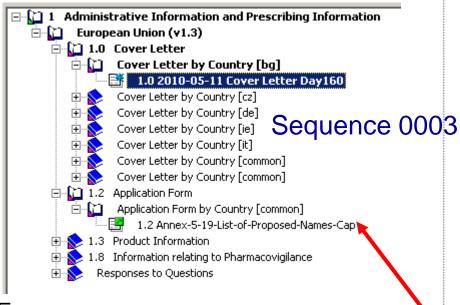


## **Current** view



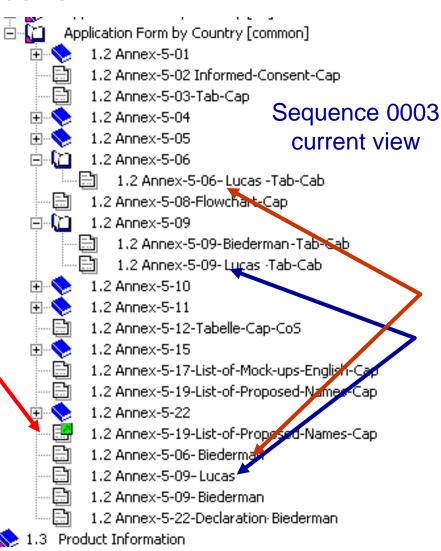


### Problems with LCM operators



#### **Errors**:

- New annex 5-19 listed under 5-22, replace not performed
- Annex 5-06 wrongly listed under 5-22
- Added annexes 5-09 wrongly listed under 5-22
- Going digital general aspects



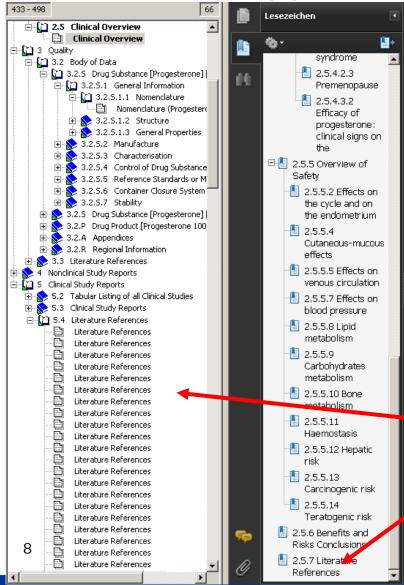


### Problems with pdf quality

- Incorrect pdf versions (only in case of version 1.3 or below)
- Missing bookmarks
- Meaningless named bookmarks
- Broken hyperlinks within sequences or across sequences
- Huge pdf files, especially if unstructured
- Scanned images and therefore no text search possible
- Badly readable paper copies badly scanned

All of those we want to have less of

Deficits in supporting navigation



PALMER J.R., ROSENBERG L., CLARKE E.A., MILLER D.R., SHAPIRO after estrogen replacement therapy: results from Toronto Breast Cancer S Epidemiol. 1991. 134: 1386-1395

2.5 Clinical Overview

<sup>151</sup> GRODSTEIN F., STAMPFER M., COLDITZ G., WILLETT W., MANSON RESNER B., FUCHS C., HANKINSON S., HUNTER D., HENNEKENS Postmenopausal hormone therapy and mortality. New Engl J Med. 1997 1775.

<sup>152</sup> DUEÑAS-DIEZ J.L., ALBERT MATEA A., LA CALLE MARCOS M. R de la terapia hormonal sustitutiva desde la perspectiva de la prodicina ba Clin Invest Ginecol Obstet. 1999, 26(9): 358-372.

<sup>153</sup> COMINO R., FERNANDEZ J.J., LUBIAN D. Tratami ato hormonal sustit mama. Prog Obstet Ginecol. 1997, 40: 303 300.

154 CAMPAGNOLI C., AMBROGGIO S., LOTANO M.R., PERIS C. Pro women approaching the menopaus and breast cancer risk. Maturita 42

155 FOURNIER A., BERRINO F, CLAVEL-CHAPELON F. Unequal rish associated with different hormone replacement therapies: results from study. Breast C; see Res Treat 2008; 107: 103-111.

BRECKWOLDT M. [Can women with previous estrogen-dependent cancer: BIRKHAUSER M., REZENBAUM M. Menopause European Consensus conference. Ed. Eska, Paris 1996, 225-228.

157 COBLEIGH M.A., NORLOCK F.E., OLESKE D.M., STARR A. Hormone and high S phase in breast cancer. JAMA. 1999, 281 (16): 1528, 231

<sup>158</sup> FOIDART J., COLIN C., DENOO X., DESREUX J., BELIARD A JOURN B., Estradiol and progesterone regulate the proliferation of auman breas Fert Steril. 1998, 69 (5): 963-969.

<sup>159</sup> NATRAJAN P.K., SOUMÁKIS K., GAMBRELL D. Jorogen replacement with previous breast cancer. Am J Obstet Guecol. 1999, 181: 288-2

160 DUPONT W.D., PAGE D.L. Menopausal Estr gen Therapy and Breast Can 1991, 151: 67-72.

<sup>161</sup> NAPPI C., AFFINITO P., DI CARLOC., ESPOSITO G., MONTEMAGNO controlled trial of progesterons vaginal cream treatment for cyclical ma with benign breast diseas. J Endocrinol Invest. 1992, 15: 801-806.

162 PAPIERNIK E., ROTTO ALIN H., BELAISCH-ALLART J. Pathologie m Gynécologie. Ed. Jammarion. Paris. 1933, p. 717 et p. 300.

DUPONT W.D., AGE D.L., PARL F.F., PLUMMER W.D., SCHUYLLEN, JENSEN D.A. Estrogen Replacement Therapy in Women with a History Breast Disease. Cancer. 1999, 85: 1277-1283.

WHATEMORE A.S., HARRIS R., ITNYRE J. Characteristics relating to collaborative analysis of 12 US case control study. Am J Epidemiol 19! HARLAP S. The epidemiology of ovarian cancer. In: MARKMAN M., HC Cancer of the ovary. Raven Press. New York, 1993, p. 79-93.

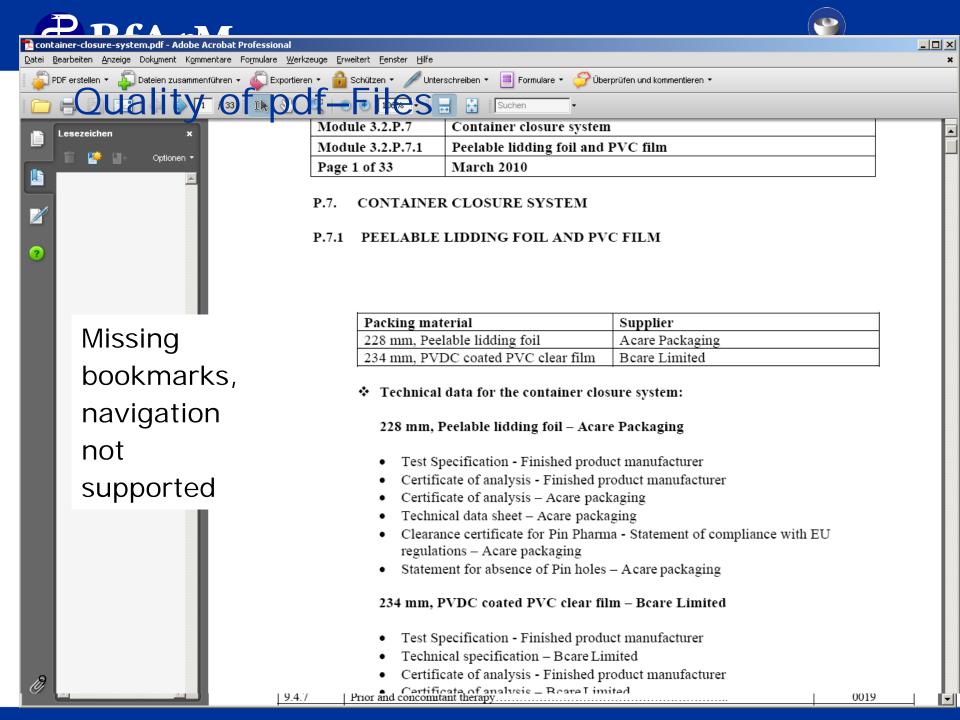
<sup>166</sup> BOYLE P., MAISONNEUVE P., AUTIER P. Update on cancer control in w Obstet. 2000, 70: 263-303.

210 x 297 mm

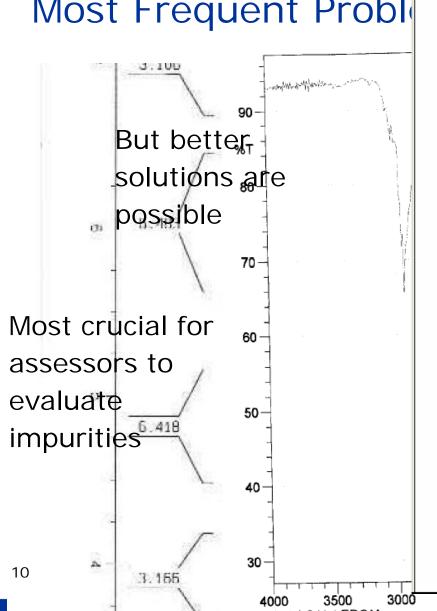
Long list of references, title accessible by links within the document

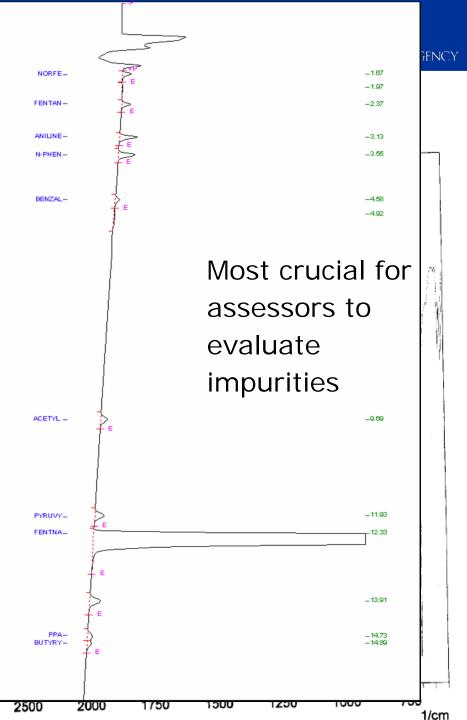
Bookmark points to the section only

TOC is not helpful



### Most Frequent Proble







# Current recommendations for e-submissions of full dossiers

- TIGes: Non-eCTD e-submission (NeeS) as a transition step to eCTD compliance (version 3.0)
- TIGes: eCTD submission as the "new" standard will detail business process aspects and requirements (version 2.0)
- TIGes: eCTD / NeeS Technical Validation Criteria (current versions 4.1 and 3.0, new versions 5.0 / 4.0 by Sept 1, 2013)
- CMDh: Best Practice Guide on the Use of the Electronic Common Technical Document (eCTD) in the Mutual Recognition and Decentralised Procedures (version 3.0)
- NtA/CMDh: Requirements on Electronic submissions for new applications, variations, and renewals within MRP, DCP or National procedures (regulary updates published)
- EMA: Q&A on Implementation of Electronic-only Submission and eCTD Submission

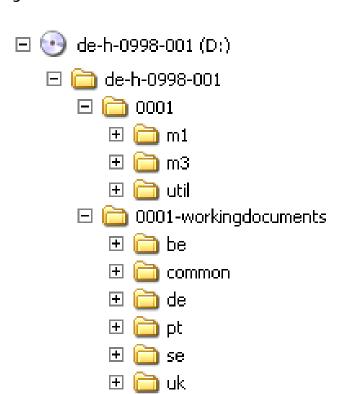


### Folder structure required

- Structured in accordance with CTD (NeeS) or completely in accordance with ICH specifications on m2 to m5 and EU specification on m1 (eCTD)
- Breakdown in conformity with the ICH Granularity Document
- Root directory named by product name or procedure number
- Working documents always in a separate folder on root level named <sequence>-workingdocuments

#### Note

Do not use container (e.g. zip, rar, 7z)
 for submissions on CD or DVD





#### File formats

#### General

- In accordance with ICH and EU eCTD specifications
- PDF not below version1.4, versions 1.5, 1.6 and 1.7 are accepted as well
- XML in Module 1 allowed, e.g. application form

#### Portable Document Format (PDF)

- Generated from electronic source documents
- Module 2 always from an electronic source document
- Scanned for certain documents only
- Scan resolution about 300 dpi recommended

≺Applicant≻

### Sending Electronic N

**Address** 



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We are pleased to submit our Application Dossier(s) for a < Procedure which details are as follows:	Mutual Recognition> / <decent< th=""></decent<>
Name of the medicinal product(s) (in the RMS):	
Pharmaceutical form(s) and strength(s):	
INN/active substance(s):	ATC Code(s):
When appropriate, please indicate: - Use of European Reference Medicinal Product	S 🔲 Yes 🗖
<ul> <li>If the strength(s) of the Reference MP differs between RMS/CM</li> </ul>	S 🔲 Yes 🗖

- If the pharmaceutical form(s) of the Reference MP differs between RMS/CMS

If the indication(s) of the Reference MP differs between RMS/CMS

■ Yes

Yes



#### Technical validation...

#### Will also include for PDF files:

- Check of security settings
   No restrictions allowed for password, copy & paste, print
- Whether hyperlinks and bookmarks are functional
- Maximum file size 100 MB
- Path length (starting at sequence level)
   Too long path lengths can easily be avoided
- Existence of ctd-toc.pdf and mX-toc.pdf as appropriate (NeeS only)
   You may use the NeeS TOC Builder



### Main Principles of Technical Validation

- Two levels of tests:
  - Pass/Fail
  - Best Practice (warnings)
  - No other or additional criteria should be set by any agencies for technical validation
- If other checks are needed, these should be proposed and discussed in the TIGes
- Current criteria in force since Dec 1st 2012
- Next versions will be implemented by Sep 1st 2013





### **Examples of Validation Criteria**

	_	_		
		V !!! # 0 !! !	Type of	
	Category	▼ Validation Criterion ▼		Comments
3.4	PDF Files	Individual files in section 1.2 have no security	P/F	These limited security settings are allowable for the application form,
		settings except for the following, which are		because they are necessary for the functioning of the eAF.
		allowed:		
		Changing the document		
		Document assembly		
		Page extraction		
		Creation of template pages.		
3.5	PDF Files	All TOC PDF hyperlinks are relative	I	Absolute (rooted) links will not work once the submission has been moved
				to the review/assessment environment.
3,6	PDF Files	The submission does not contain corrupted	P/F	This can be achieved by opening a PDF file in software which is
		files		compliant to ISO 32000-1; if the file opens without error, the PDF file is
				considered to be conformant. Absence of detection of conformance
3.BP1	PDF Files	Files have been created and saved as PDF	BP	For PDF files with apparent versions of 1.3 or earlier, the version
		1.4, 1.5, 1.6, or PDF 1.7		information should be taken from the first eight characters from the first
				line of the header in the file. For versions 1.4 and higher, the version
				should be taken from the document catalogue dictionary, if present. If both
				the header information and the catalogue information are present, then the
				document catalogue dictionary information takes precedent, see PDF
				32000-1:2008 specification, chapter 7.5.2 for further details.
				Only the PDF versions specified are recommended by ICH.
				This test is important due to archiving and also that PDF files can be
				correctly open and read by assessors.
3.BP2	PDF Files	Hyperlinks and bookmarks within	BP	Only links that open in the same software application are tested. Other
		documents, or between documents within		links (e.g. web links and e-mail addresses) are not considered to link to
		the same NeeS, have a valid target.		essential content and should not be tested.
17				If this BP criterion is not met, the assessor might not be able to
17				conveniently find the relevant documents and read the submission as
				intended by the applicant.





### Check: Pass/Fail (P/F)

- These are validation criteria that can either be passed or failed
- ALL have to be passed before start of the procedure
- May lead to delays in content validation!
  - Special note on "Y" criteria:
     Never operate on a commonly submitted document in a national submission never operate on a nationally submitted document in a common submission
- A NeeS or eCTD sequence that fails to meet one or more of these criteria should be reported as invalid and an technically corrected submission should be submitted by the applicant – using the same sequence number





### Check: Best Practice (BP)

- The applicant should always test also the BP and if not met it should be explained in the cover letter/reviewer's guide or in an added note to the submission (to prevent changing the MD5 checksum)
- eCTD or NeeS that get a "Warning" for BP criteria should still be accepted by the agency during technical validation (if no "Fail" in the P/F-test)
- Agencies should NEVER reject for BP warnings even if the reason for them are not explained by the applicant



#### Restrictions in Technical Validation

- ✓ Incorrect pdf versions (only in case of version 1.3 or below)
  - Missing bookmarks
  - Meaningless named bookmarks
- ✓ Broken hyperlinks within sequences or across sequences
- √ Huge pdf files, especially if unstructured
  - Scanned images and therefore no text search possible
  - Badly readable paper copies badly scanned

Aspects we cannot control by technical validation...





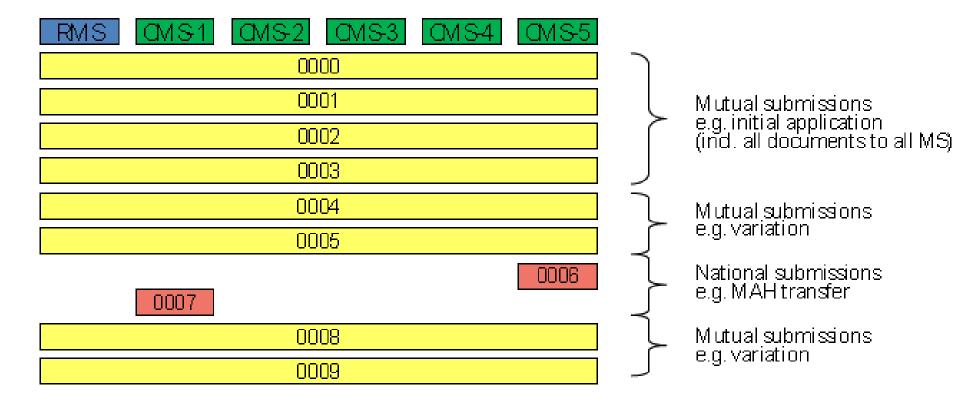
#### CMDh Best Practice Guide 10/2011

#### Concerning eCTD only, but for all human medicinal products

- Business rules for DCP and MRP
- Comprehensive model required, i.e. all sequences need to be distributed to all member states concerned.
- Tracking table for submitted sequences to guarantee overview on sequences distributed
- Detailing requirements on life cycle activities
- National product information text shall be excluded from eCTD dossier file

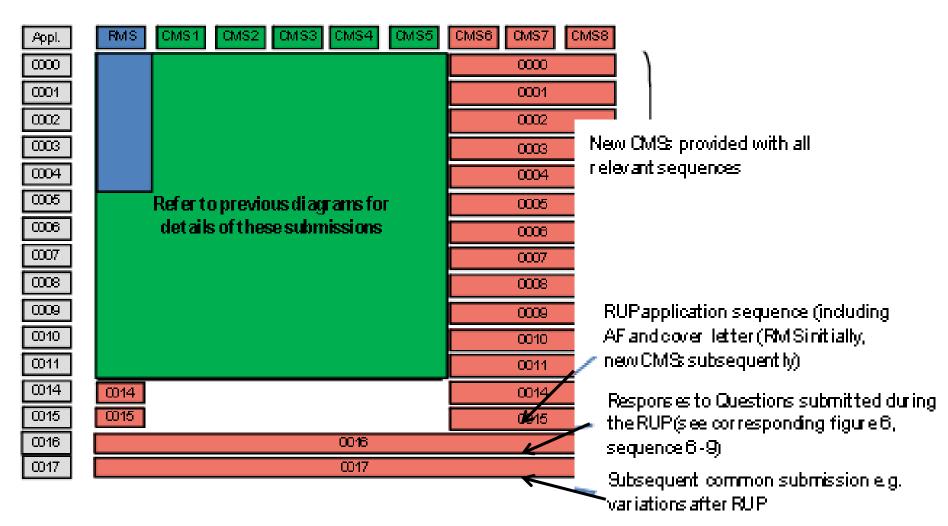


### Comprehensive Model





### Repeat Use Procedure (1/2)





### Repeat Use Procedure (2/2)

#### Tracking table

	Submission description	RMS CM Ss - First Wave						CMSs - Second Wave			
Se quence		DE	<b>AT</b> (CMS-1)	ES (CMS-2)	FR (CMS-3)	SE (CMS-4)	SK (CMS-5)	FI (CMS-6)	LV (CMS-7)	NL (CMS-8)	
0017	Responses to Questions	Apr 11	Apr 11	Apr 11	Apr 11	Apr 11	Apr 11	Apr 11	Apr 11	Apr 11	
0016	Manufacturing change variation	Apr 11	Apr 11	Apr 11	Apr 11	Apr 11	Apr 11	Apr 11	Apr 11	Apr 11	
0015	MRP with the new MSs has to be finalised – specific sequences for RUP-MRP – see figure 6, sequence 6 - 9	Jan 11	Jan 11	Jan 11	Jan 11	Jan 11	Jan 11	Jan 11	Jan 11	Jan 11	
0014	RUP initiation sequence	Dec 10	Jan 11	Jan 11	Jan 11	Jan 11	Jan 11	Jan 11	Jan 11	Jan 11	
0013	Responses to Questions – change in legal status (FR)				Aug 10						
0012	Change in legal status (FR)				Jul 10						
0011	Responses to Questions	Jun 10	Jun 10	Jun 10	Jun 10	Jun 10	Jun 10	Jan 11	Jan 11	Jan 11	
0010	Manufacturing change variation	Mar 10	Mar 10	Mar 10	Mar 10	Mar 10	Mar 10	Jan 11	Jan 11	Jan 11	
0009	Day 90 - Final En product information	Nov 09	Nov 09	Nov 09	Nov 09	Nov 09	Nov 09	Jan 11	Jan 11	Jan 11	
0008	Day 85-90 Responses	0 ct 09	Oct 09	Oct 09	Oct 09	Oct 09	Oct 09	Jan 11	Jan 11	Jan 11	
0007	Day 60 Consolidated Response Document	Sep 09	Sep 09	Sep 09	Sep 09	Sep 09	Sep 09	Jan 11	Jan 11	Jan 11	
0006	Validation update	Mar 09	Mar 09	Mar 09	Mar 09	Mar 09	Mar 09	Jan 11	Jan 11	Jan 11	
0005	Country specific information (All)	Feb 09	Feb 09	Feb 09	Feb 09	Feb 09	Feb 09	Jan 11	Jan 11	Jan 11	
0004	MRP update sequence	Jan 09	Feb 09	Feb 09	Feb 09	Feb 09	Feb 09	Jan 11	Jan 11	Jan 11	
0003	Final agreed National product information	Dec 08	Feb 09	Feb 09	Feb 09	Feb 09	Feb 09	Jan 11	Jan 11	Jan 11	
0002	Responses to questions	Sep 08	Feb 09	Feb 09	Feb 09	Feb 09	Feb 09	Jan 11	Jan 11	Jan 11	
0001	Validation update	Dec 07	Feb 09	Feb 09	Feb 09	Feb 09	Feb 09	Jan 11	Jan 11	Jan 11	
0000	Initial MAA	Dec 07	Feb 09	Feb 09	Feb 09	Feb 09	Feb 09	Jan 11	Jan 11	Jan 11	

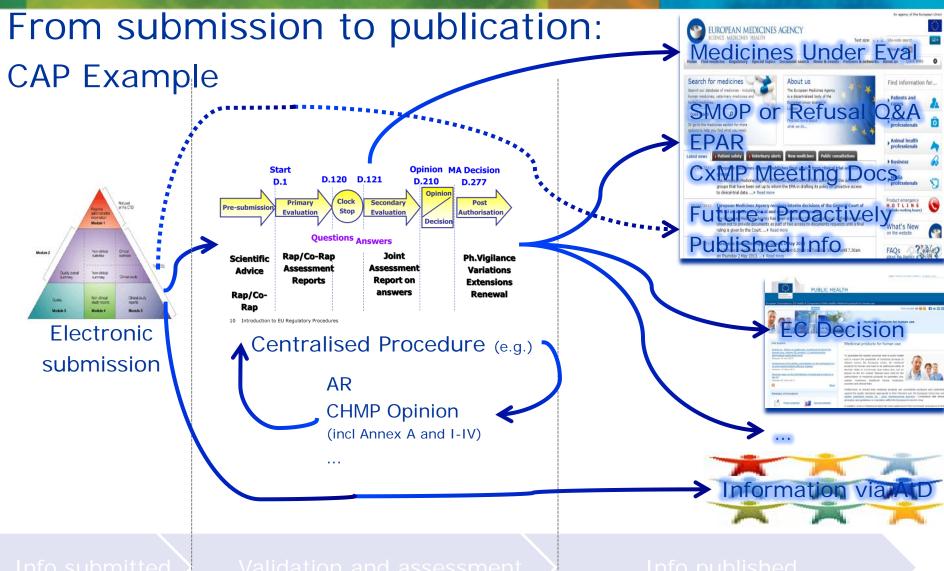




### Agencies' Expectations

- Receipt of instantly growing number of e-only submissions
- Strategies for promoting industry willingness to switch
- Agreement about target date to request mandatory e-only submission
- Improvement of dossier quality to achieve advantages of electronic submissions





EU28: Science, Medicines, Health - A regulatory system fit for the future: Going Digital